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Table 1.--Corn: Acreage, supply, distribution and prices, 1969-74

Item	1969/70	1970/71	1971/72	1972/73: preliminary	1973/74: forecast 1/	1974/75 projected
Acreage (Mil.)						
Base or allotment	90.3	90.3	90.2	88.1	88.7	---
Set-aside	27.2	26.1	14.1	24.4	5.7	0
Planted	64.3	66.8	74.1	67.0	71.6	78.3
Harvested for grain	54.6	57.4	64.0	57.4	61.7	68.8
Yield per acre (Bu.)	85.9	72.4	88.1	97.1	91.4	97.
			Mil. bu.			
Supply						
Carryin (Oct. 1)	1,118	1,005	667	1,126	709	608
Production	4,687	4,152	5,641	5,573	5,643	6,674
Imports	1	4	1	1	1	1
Total	5,806	5,161	6,309	6,700	6,353	7,283
Disappearance						
Feed	3,795	3,581	3,978	4,310	4,190	4,645
Food, Ind. and Seed	394	396	409	423	430	430
Total domestic	4,189	3,977	4,387	4,733	4,620	5,075
Exports	612	517	796	1,258	1,125	1,050
Total	4,801	4,494	5,183	5,991	5,745	6,125
Carryout (Sept. 30)						
Government 2/	543	330	713	* 172		
"Free"	462	337	403	537		
Total	1,005	667	1,126	709	608	1,158
			Dol. per bu.			
Price Support and season price						
National av. loan rate	1.05	1.05	1.05	1.05	1.05	1.10
Support payment 3/	.13	.14	.16	.26	.16	
Received by farmers	1.16	1.33	1.08	1.57	2.37	
Chicago, No. 2 yellow	1.31	1.47	1.23	1.91	**2.61	
Omaha, No. 2 yellow	1.24	1.39	1.23	1.30	**2.48	

1/ Based on January 1 indications.

2/ Under loan and owned by CCC on October 1, 1973 includes grain committed for sale by CCC and still carried as part of total inventory in earlier years included only grain not committed for sale.

3/ Average earned on all corn produced.

* Includes 81 million bushels committed for sale by CCC.

** October-January average.

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The Feed Situation is published in February,
May, August, and November

(No April *Situation* is scheduled this year)

SUMMARY

Feed grain total use this season may be a little below last season's volume, but it will exceed 1973's production and reduce stocks at the end of the marketing year to the lowest level since the early 1950's. With the strong demand and the high prices being paid for feeds, farmers intend to sharply boost plantings this spring. Not only will the resulting production probably exceed needs for the 1974/75 season, it also should permit stocks to increase sharply.

The January 1 prospective plantings report indicated 127 million acres may be planted to feed grains this year. This would be 5% above the 1973 acreage. If weather is normal and if adequate inputs are available, feed grain production from this area would total approximately 235 million tons, 15% more than in 1973.

Plans by farmers included seedings of 78.8 million acres nationally to corn, 10% above 1973. If the projected yield of 97 bushels per harvested acre is achieved, that area would give a crop of 6.7 billion bushels, 18% above 1973 production.

Intended sorghum acreage at around 19½ million would be slightly above acreage in 1973 and would produce a crop close to the 937-million-bushel outturn in 1973. Intended oat acreage at 19 million also was nearly as large as in 1973. But farmers intended to seed about 15% less barley area, down to around 9½ million acres.

Feed grain supplies for 1973/74 total 238 million tons, 4% less than in 1972/73. Beginning stocks were small at 32 million short tons, while production of 205 million tons was up 3% from 1972.

With the tighter supplies, higher prices, and increased availabilities of soybean meal, feed grain domestic use in 1973/74 may not quite match last year's record 1973 million tons. Exports for 1973/74, based primarily on undelivered export sales and shipments to date, are estimated at 40 million tons, down somewhat from last year's record 43 million tons.

Nevertheless, total use of 211 million tons will exceed 1973 crop output, drawing the carryover down to about 27 million tons, the least since 1952.

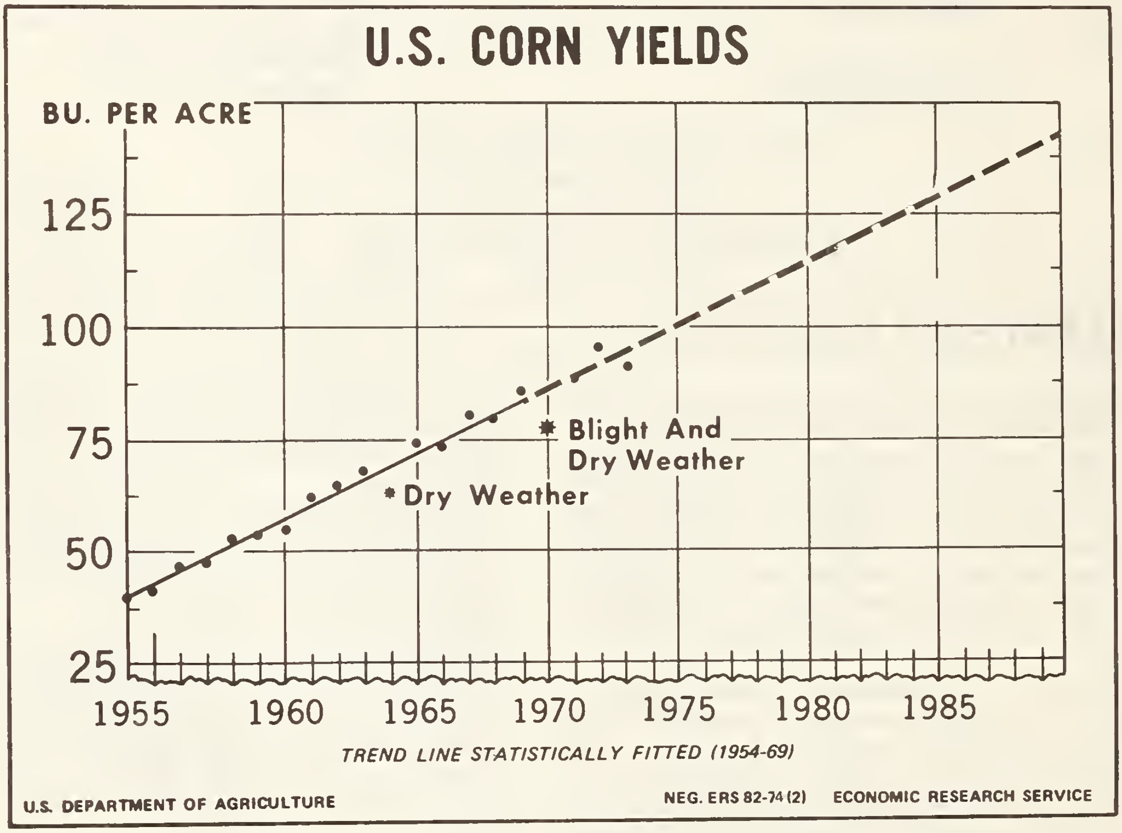
Feed grain prices are nearly double those of a year earlier and will stay strong over the next few months because of the tight supply and strong demand. Prices this summer will hinge primarily on 1974 crop and foreign demand prospects.

Corn disappearance in 1973/74 will likely total

around 5.8 billion bushels, down 4% from 1972/73. Domestic use is estimated at over 4.6 billion bushels, down approximately 100 million, and exports at over 1.1 billion bushels, off roughly 135 million bushels. This means that carryover on October 1 will drop to about 600 million bushels, about 15% less than a year earlier and lowest since 1952.

Grain sorghum is benefiting from its larger supply, because wheat and other grains are in smaller supply and high priced. Domestic use in October-December was up 8%, and probably will total 12% more for the entire season. Exports also are running large and may wind up reasonably close to the 212 million bushels shipped in 1972/73. As a result, sorghum stocks on October 1 would be under 100 million bushels for the second consecutive year. Oat usage and July 1 carryover stocks probably will decline primarily because of the smaller starting supply. The barley carryover on July 1 also will be down approximately 15% to below 150 million bushels because of increased exports. Supplies and domestic consumption are little changed from last season.

Domestic feeding of protein feed is estimated at 20 million tons, 8% above 1972/73 but still only near the high marks set during 1969-71. Prices this season are lower and much more stable than last year when they began their historic run-up. The large U.S. supply of soybeans is giving stability to the market. Meal prices (Decatur) in recent weeks have hovered around $175 per ton. Barring any new developments in export demand, meal prices likely will continue near current levels into spring.



FEED SITUATION

PROSPECTS FOR 1974/75

Feed Grains (total)

According to the January 1 prospective plantings report, farmers indicated plans of seeding 127 million acres to feed grains in 1974, 5% above 1973 and 10% above 1972. Thus, farmers are responding to prevailing high cash grain prices and to a futures market indicating high prices will hold up in 1974. With average weather and adequate availabilities of fuel and agricultural chemicals, the intended acreage would produce about 235 million tons of feed grains, 15% or 30 million tons more than in 1973. Coupling this production to the 27-million-ton carryout expected this fall gives a potential supply for 1974/75 of 262 million tons, 10% above 1973/74.

With grain-consuming animals projected at 119 million units in 1974/75 (up about 2%), and assuming the consumption rate will be some what above the 1953-69 trend of about 1.33 tons of feed grains per animal, domestic feed needs would total around 165 million tons, 11 million tons more than estimated for 1973/74 and 8 million more than fed during 1972/73. Adding 17.6 million tons of food, industry, and seed needs to the feed portion gives domestic use requirements of approximately 182 million tons.

Projected export requirements in 1974/75 of 37 million (short) tons, are down from the 40 million tons likely for this season, and from the record 43 million moved overseas in 1972/73. The much larger U.S. crop plus a projected modest increase in feed grain crops elsewhere should boost supplies available for world trade. The potential impact of the fuel crisis on world crop production is expected to be moderated by policies to allocate fuel for agriculture.

Total feed grain requirements in 1974/75 are projected at around 219 million tons, 14% above 1973/74 and slightly above 1972/73. Projected total needs are less than projected 1974 production, resulting in some recovery in carryover stocks to around 43 million tons.

If the feed situation this season approaches this supply and demand balance, feed grain prices this

Feed grains January 1 prospective plantings with comparisons

Crop of—	Jan. 1	March 1	July 1	Dec.-Jan.	Jan. 1 as a percent of July 1
	Million acres	*Million acres*	*Million acres*	*Million acres*	*Percent*
Corn					
1971	71.0	71.5	74.7	74.1	95
1972	71.2	68.5	66.8	66.8	107
1973	71.5	71.6	72.5	71.6	99
1974	78.8				
Sorghum					
1971	20.2	20.2	20.7	21.3	98
1972	19.8	18.4	17.4	17.5	114
1973	19.1	17.5	19.5	19.3	98
1974	19.6				
Oats					
1971	23.6	23.2	21.9	22.0	108
1972	21.1	21.0	20.5	20.3	103
1973	20.5	20.5	19.4	19.2	106
1974	19.0				
Barley					
1971	11.0	10.9	11.2	11.1	98
1972	10.1	10.4	10.5	10.6	96
1973	10.5	11.0	11.4	11.3	92
1974	9.6				
Total Feed grains					
1971	125.8	125.8	128.5	128.5	98
1972	122.2	118.3	115.2	115.2	106
1973	121.6	120.6	122.8	121.4	99
1974	127.0				

fall could drop sharply from current high levels. Nevertheless, the feed grain carryover would still be less than that of most recent years, and prices would continue to be sensitive to market developments.

Corn

In late December farmers in 35 States reported intentions of planting 77.4 million acres of corn. Remaining States would expand this to almost 79 million acres. With average growing weather this season and adequate availability of fuel and agricultural chemicals, yield per acre would be about 97 bushels per harvested acre and near the long-term trend, for a 1974 corn crop of 6.7 billion bushels, 18% above 1973.

A crop of this size would be ample for projected 1974/75 domestic use and export needs and would bring a recovery in carryover stocks from the low 600 million bushels estimated for this October 1.

Here are some assumptions and facts behind the Department's corn yield projection:

1. Fertilizer although much higher priced, will be generally adequate for the planned expansion level except for some spot shortages; other agricultural chemicals and fuel will be adequate.
2. Normal weather patterns will prevail. Weather last fall was good to excellent for plowing and fertilizer applications.
3. There will be a minimum of marginal land planted to corn. Additional plantings would come from land previously set aside and from the conserving base. The set aside land should be of average quality while it is conceivable that conserving base land may contain a relatively high level of plant nutrients if it has been covered with soil conserving forages.
4. Average plant population (which was down 3% in 1973) will resume its upward trend of recent years.
5. Farmers are coming off 2 profitable years, which provide capital for purchasing more and better items for crop production.
6. Sharp acreage increases do not always signal a downturn in yields; big acreage increases in 1959, 1967 and 1971 were associated with record yields.
7. Most of the expected increase in yields would be in the Corn Belt, which weighs heavy in the national average yield.
8. The trend yield for 1953-69 is 98 bushels for 1974. Over the past 2 decades, yield has never dropped more than 4 bushels below the trend line except in 1964 and 1970 in which sharp drops were recorded because of drought and/or blight disease.

Grain Sorghum

Planned 1974 sorghum acreage on January 1 was 19.6 million acres, up 0.3 million from 1973, up 2.3 million from 1972 but down 1.2 million from 1971. Heavy winter wheat plantings in major sorghum producing States (especially Kansas) apparently prevented expansion for sorghums. There is a large degree of uncertainty in the final outcome of sorghum acreage, as sorghum and soybeans can follow on harvesting of winter wheat in many of the Southern States. Weather will be a principal factor at harvesttime in these areas. Sorghum yields projected at 58 bushels per acre would give a crop of around 928 million bushels, not materially different from 1973 production. With continued expansion of cattle feeding in the Southwest production at this level would be short of expanding needs. Consequently Southwestern livestock feeders may rely more on the potentially large wheat (2.1 billion bushels) and corn crops for grain concentrate requirements in 1974/75.

With a potentially tight sorghum situation in 1974/75, exports likely would drop below the 212-million-bushel-level of 1972/73 and the 200 million estimated for 1973/74. In this event, importers probably would shift from sorghum to relatively lower priced corn.

Oats

Farmers reported plans of seeding 19 million acres of oats in 1974, virtually unchanged from 1973 plantings. Assuming that about 14 million acres will be harvested for grains, a yield of 54 bushels would produce a crop of around 756 million bushels, 14% above 1973. Yields averaged 47 bushels per acre in 1973, down from 56 in 1971 and 51 in 1972, because of dry weather in major oat producing areas.

If the July 1 carryover estimate of 276 million bushels is realized, a crop of this size would hold supply close to last year's 1.1 billion bushels. Domestic use of oats has been trending downward over the years, and may decline further in 1974/75. Exports may drop from the heavy movement this year because of potentially large availability of corn. The direction of oat price changes would follow those of corn but could be relatively stronger than usual, because the potential oat supply would make up a smaller proportion of the total feed grain supply.

Corn prices compared with other grains[1]

Grain	January			
	Average 1968-72	1972	1973	1974
	Percent of corn	*Percent of corn*	*Percent of corn*	*Percent of corn*
Corn	100	100	100	100
Grain sorghum	91	97	110	87
Oats	97	102	102	89
Barley	99	111	119	105
Wheat	108	114	160	191

[1] Average prices received by farmers in mid-January converted to dollars per hundredweight.

Recent prices of oats have been running about 90% of corn which are about normal.

Barley

Barley farmers reported plans of seeding 9.6 million acres of barley in 1974. This would be 15% less than in 1973 and the lowest acreage since 1952. The drop in planned acreage is due to a shift from barley into wheat in the major barley-wheat producing areas of the Northern Plains.

Assuming an average growing season, a projected yield of 46 bushels per acre would give a crop of about 409 million bushels, a little below last year's 424 million. Production at this level would be somewhat below projected domestic and export needs, resulting in a rather sizable drop in the July 1, 1975 carryover. Despite this kind of supply and demand balance, feed barley price movements are likely to be similar to those of corn. Like oats, feed barley prices compared to corn may be higher than usual. Malting barley would continue to command premium prices.

1974/75 Soybean Prospects

Soybean growers in late December planned to plant 55.4 million acres to soybeans, 3% (2 million acres) less than in 1973. If weather and yields are average, this area would produce about 1,550 million bushels of beans, virtually the same as in 1973. The soybean carryover this September 1 is estimated at 240 million bushels, 4 times more than on that date a year earlier and the highest since 1969. Thus, potential soybean supplies for 1974/75 are projected at 10% above this year's record level.

FEED GRAIN OUTLOOK FOR 1973/74

Domestic Use to Fall

Domestic use of feed grains in 1973/74 probably will not match last year's record of 173 million tons. Higher prices and 4% smaller supplies of feed grains point to domestic use of around 171 million tons. Better quality grain, (especially corn), a decline in livestock and poultry feed price ratios, and availability of more protein feed at more stable prices also contribute to reduced feeding rates in the 1973/74 feeding season. Grain-consuming animal units (GCAU's) are forecast at 116.5 million units, 1% above 1972/73. But, feeding of feed grains per unit is projected to drop to 1.32 tons, below the record 1.35 ton rate of 1972/73. Most of the increase in GCAU's will be in other beef cattle and poultry. Hogs will be little changed from 1971/72 and 1972/73 levels. The number of dairy cows will continue a decline of around 4% to a little over 11 million.

Will Lower Feed Prices Encourage Livestock Expansion?

Feed expenditures make up a substantial share of the total costs of livestock and poultry production. Here are some typical feed costs as a percentage of total production costs:

	Typical	Current
Production of—		
Beef (from 600 lb. feeder steer)	25%	30%
Pork (from 40 lb. feeder pig)	35%	45%
Broilers & Eggs	60-65%	70-75%

The U.S. livestock and poultry industries have been able to flourish not only because of strong demand but also because of abundant supplies and relatively low prices of feeds. For example, recent expansion in cattle and calf numbers was encouraged by low-priced feed in 1971/72. Prices received by farmers for feed grains in 1971/72 dropped 13% from a year earlier.

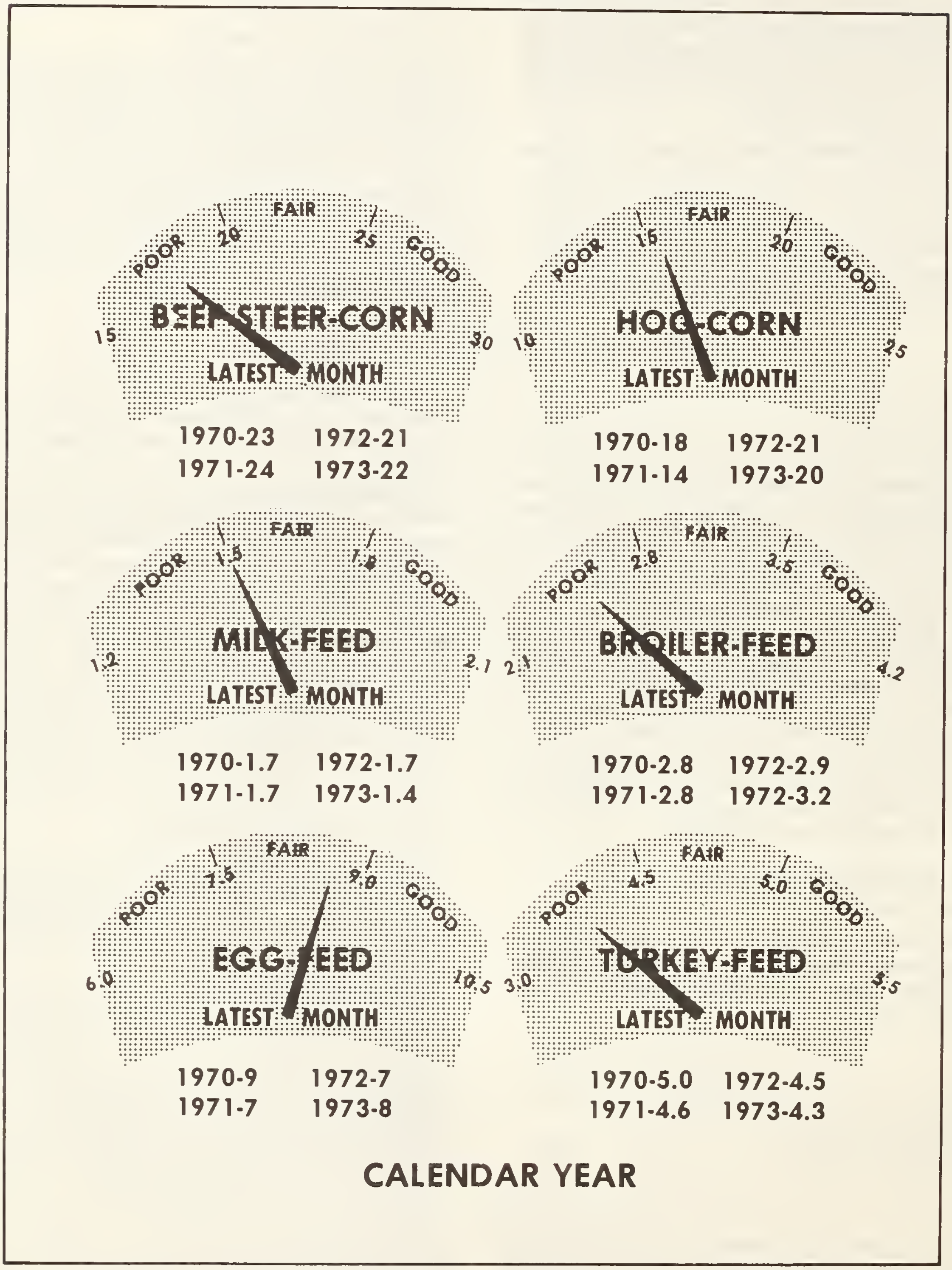
Since 1970/71, feed supplies and prices have swung widely, making it more difficult for planning orderly expansion in livestock and poultry production. Plentiful feed at low prices, however, also can present problems for the feed-livestock economy. For example, low feed prices in 1971/72 contributed to an expansion in egg production, which eventually depressed egg prices. Following a 6% increase in 1970/71, red meat production dropped 1% in 1971/72 and 4% in 1972/73. In October-December 1973 meat output was off 3%. It seems that low-priced feed rather than high and unstable priced feed may be conducive to steady growth in livestock and poultry production.

Export Demand Holding Strong

U.S. feed grain exports in 1973/74 are forecast at 40 million tons, down only 3 million from 1972/73's phenomenal level. October-December exports totaled 11 million tons, a fourth above the year before and highest ever for this quarter.

The strong foreign demand for feed grains was triggered by short food and feed crops around the world in 1972. World disappearance of feed grains, consistently increasing at around 19 million tons annually and the short 1972 grain crops sharply reduced carryover stocks in exporting countries in 1973. Despite a 30-million-ton increase in the world feed grain crop (and even with a record wheat crop), 1973/74 supplies are only big enough to about match requirements, still holding carryover stocks in 1974 down to sensitively low levels. As a result, another big production increase in 1974 would be required to meet needs in 1974/75 and provide some recovery in carryover stocks.

LIVESTOCK AND POULTRY FEED PRICE RATIOS
(GAUGES TO FEEDING RATES)



NEG ERS NO. 466-74(1)

Feed concentrate balance and grain consuming animal units

Item	Year beginning October[1]		
	1971	1972	1973[2]
	Million tons	*Million tons*	*Million tons*
Concentrates			
Supply	284.9	287.7	277.9
Fed			
Feed grains	149.1	155.3	154.1
Wheat	8.5	5.0	5.0
Rye	.5	.5	.5
Byproduct feeds	34.5	33.5	34.6
Total, fed	192.6	194.3	194.2
	Million	*Million*	*Million*
Grain-consuming animal units	117.0	115.5	116.5
	Tons	*Tons*	*Tons*
Supply per animal unit	2.44	2.49	2.39
Fed per animal unit	1.65	1.68	1.67

[1] Except oat and barley supplies which start July 1. [2] Forecast January 1974.

Carryover Stocks Lowest Since 1953

Disappearance of feed grains in 1973/74 probably will total around 211 million tons, about 3% below last year and 3% above the 1973 crop of 205 million tons. Consequently, combined carryover stocks of oats and barley this summer, corn and sorghum this fall will be further reduced to around 27 million tons, nearly a fifth below a year earlier and the lowest in over 20 years.

In contrast to past years, virtually all the feed grain supply is privately controlled. Even the ultimate destination of the grain placed under loan will be determined by farmers as market prices are more than double loan rates. The higher grain prices this season give producers considerable flexibility in marketing their crop. Farmers can sell a portion of their crop to meet financial obligations and still have a sizable amount of grain remaining to store and market when they think the time is right.

CORN

Domestic Use May Slip

Domestic use of corn in 1973/74 probably will drop about 2% from last year's record 4.7 billion bushels. The 5% smaller supply, less moisture in the 1973 crop, much higher grain prices, and lower-priced protein feed ingredients (especially oilmeals) are the principal factors behind this expected slowdown. The last time consumption fell was in 1970/71, and was fairly well explained by a smaller supply and a sharp drop in the hog-corn price ratio which eventually reduced pork production. Hogs are major consumers of corn, accounting for approximately 40% of the volume of corn fed domestically.

Although hog-corn price ratios have slipped from high levels reached in 1972/73, they continue to average (fair) since October. (See chart on page 8 for ratings of livestock and poultry feed ratios.)

Domestic use of corn in October-December totaled 1,567 million bushels, down slightly from the unusually high level in 1972. Use was greater than anticipated, and reflected a continuation of heavy feeding rates from the July-September quarter. Despite prospects of higher prices and sagging livestock and product output, domestic use of corn in January-March is estimated at 1,175 million bushels, close to use in that quarter of 1973, as high prices of livestock and poultry appear to be a major factor contributing to heavy feeding per animal.

October-December Exports Highest Ever

Corn exports during 1973/74 are estimated at 1,125 million bushels, down from last year's 1,258 million. Exports in October-December totaled 320 million bushels, a fourth above the prior season's heavy movement. As indicated in the November issue of the *Feed Situation*, if the 1,125 million export estimate remains unchanged, we expect more than half of it to move during the first 6 months of 1973/74. Early purchases of grain prior to the 1973 and 1974 crops serve as a hedge for importing nations against the possibility of a short world supply. Countries that have contracted for U.S. grain apparently want possession of it as soon as transportation and their storage facilities will allow.

Corn exports are holding up quite well to Eastern and Western Europe, Peoples Republic of China, (PRC), USSR, and Southeastern Asia (table 13) The major noticeable drop is shipments to Western Hemisphere countries; as prevailing high grain prices may be taking their toll in the less developed countries. The United States exports corn to over 100 countries; economies of more than half of these countries are the less developed countries.

Early prospects for 1974 Argentine corn production point toward a crop similar in size to last year's big 372-million-bushel outturn. In South Africa, weather has been good to excellent for its corn crop to be harvested this spring and prospects point toward a large crop.

Strong Prices Continue

Early February corn prices at Chicago are running about $3.00 a bushel, up 75¢ from the low last October and the highest since reaching $3.40 last August 14.

Current prospects point to continuation of strong prices over the next few months. The 1973/74 corn supply is down 5% and is the tightest of all the feed grains. Although domestic use and exports likely will be down from 1972/73, they will be second highest of record. As a result, requirements must be drawn from 1973/74 supplies suggesting there will be no significant market weakness until mid or even late summer, when crops here and abroad begin to mature. The liklihood of a 1974 corn crop as large as presently projected, 6.7 billion bushels along with favorable prospects for large crops in other countries could bring a substantial decline in prices this summer.

Another key to prices this summer will be export bookings for the 1974/75 season. For example, such bookings rose sharply last summer, indicating that 1973/74 would be a strong export season for corn. The first undelivered export sales report, issued June 13, 1973, indicated 638 million bushels of corn had been booked for export in 1973/74. By September, the amount booked had swollen to 1.3 billion bushels. For 1974/75 prospects for a sizable increase in world feed grain production could cause some importers to wait for easing prices. This could result in a lower level of advanced export bookings prior to the fall feed grain harvest.

However, advanced bookings for 1974/75 now total 26 million bushels, with about 16 million bushels booked by the People's Republic of China (PRC). The imports by PRC are a new force in the world feed grain market. The People's Republic of China, although one of the world's largest grain producing nation's, has the potential to remain a significant grain importer in the future. If PRC continues to be a major importer of feed grains, the world corn market will be strenghthened. Last year, PRC imported 48 million bushels of U.S. corn; so far this season it has imported 24 million bushels, and has 74 million booked for delivery in January-September.

Prices this spring will be especially sensitive to weather and planting progress. A spring similar to last spring's wet and late experience would bring concern about crop prospects and could trigger a substantial price rise from present levels.

The season average price of corn more than doubled in 1972/73 for the first time in this century. For example, August 1973 Chicago prices averaged $2.91 a bushel, compared with the October 1972 low of $1.32. Reviewing more than 50 years of corn prices, the nearest the season high came to doubling the season low was when the short 1946 crop raised prices from $1.39 in November to $2.51 the following September.

What was so phenomenal about the record season price rise in 1972/73? The 1972 corn crop was only a shade below the record 1971 production and total supply was a record 6% above the previous peak in 1971/72. Thus, 1972/73 was a year of unprecedented demand, especially foreign, in which U.S. corn exports rose to 1,258 million bushels. In contrast, the situation may be different in 1974/75. If the 1974/75 supply, demand and carryover stocks turn out as projected, corn prices could drop sharply from current high levels—possibly to below $2.00 at harvesttime.

Looking back more than 50 years, this is what 6 major harvesttime price declines from spring or summer high (in bold type) looked like at Chicago:

Year	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	% drop
	Dollars per bushel	*Dollars per bushel*	*Dollars per bushel*	*Dollars per bushel*	*Dollars per bushel*	*Dollars per bushel*	*Dollars per bushel*	*Dollars per bushel*	*Dollars per bushel*
1925	1.05	**1.15**	1.13	1.08	1.02	.91	.82	.83	28
1931	**.58**	**.56**	**.58**	.57	.46	.42	.38	.43	26
1937	**1.35**	**1.35**	1.22	1.18	1.04	1.06	.66	.53	61
1946	1.21	1.45	1.53	**2.17**	1.93	1.89	1.82	1.39	36
1948	**2.32**	**2.31**	**2.32**	2.14	1.95	1.81	1.47	1.38	41
1971	1.51	1.52	**1.57**	1.48	1.29	1.16	1.10	1.07	32

The 61% drop in 1937 prices resulted from a boom-to-bust situation. The 1936 corn crop was so short that the U.S. imported about 7% of its needs, skyrocketing prices. Production in 1937 recovered to a record level, pushing prices down sharply at harvest time.

GRAIN SORGHUM

Feeding Heavy in First Quarter

October-December domestic consumption of sorghum totaled 306 million bushels, 8% above a year earlier and the highest since the 350 million bushels of 1969. This large consumption primarily reflects the larger supply of sorghum and the tight availabilities of wheat for feed in the Southwest. It also reflects a sharp turnaround from the July-September quarter when sorghum feeding fell about 30% from a year earlier, in contrast to the general up trend for the quarter.

Domestic consumption of sorghum for the entire year is forecast at 744 million bushels, about 12% above the 666 million bushels fed during 1972/73. Consumption may continue to be unusually heavy during the next 2 quarters, but could tail off in July-September if 1974 wheat and sorghum crops reach their potential as indicated by indicated acreages and trend yields.

Exports Strong

Sorghum exports during October-December amounted to 56 million bushels, a fifth above last year and the highest since 1966. As usual, the bulk of the exports went to Japan, with the remainder going to other Asia, Oceania, Western Hemisphere and the EC. Exports for the year are estimated at 200 million bushels, fairly close to the 212 million shipped during 1972/73. The quarterly export pattern likely will continue to show sizable movements during the January-March and April-June quarters. However, exports during July-September which are largely new crop sorghum, will be influenced by the size of the Texas sorghum crop, which is usually harvested by the end of September.

Sorghum Prices Record High

The tight grain situation has brought record high prices for sorghum. January milo prices at Kansas City were running mostly $4.50 and $4.75 per cwt. but were quoted at $5.00 for a few days. The prices were similar to those in August 1973 which swung between $4.30 and $5.50. Early February milo prices, compared with $3.00 to $3.15 a year ago, are record high for this time of year. Because of strong demand, prices likely will continue high over the next few months, but will be influenced by the impact of the 1974 wheat harvest which begins in May. If 1974 wheat and corn crops are record large as indicated by increased acreages, prices of milo probably could decline during the summer.

OATS

Domestic Use Down, Exports Up

Domestic consumption of oats during July-December 1973 totaled 405 million bushels, down a tenth. Most of the drop in consumption is attributed to reduced supplies and high prices of oats relative to other grains. The starting supply for 1973/74 was down 13% and prices at the farm during July-January averaged 85% higher.

Oat exports have been phenomenal so far this season, totaling around 36 million bushels during July-January 1973/74, sharply more than the 5 million bushels exported in that period last year. Most of the oats are going to European Community. Exports for the entire season likely will reach the 50-60 million bushel mark, the highest in 2 decades. Undelivered export sales for February-June totaled about 20 million bushels and included 13 million to the European Community and 7 million to unknown destinations.

Use of oats for the entire marketing season likely will total around 800 million bushels, dropping the July 1 carryover to under 300 million bushels, or approximately a third below last year and the lowest mark since 1968.

Oat prices at Minneapolis are running about $1.70 a bushel and about double those last year. The higher prices are due to the tightness in the overall grains complex. Prices will continue strong over the next several months, with changes paralleling those of corn.

BARLEY

Domestic Use Little Changed

Domestic use of barley during July-December 1973 totaled 214 million bushels, close to that of a year earlier. Domestic usage for the year is estimated at around 385 million bushels, about the same as in 1972/73. Despite higher prices, consumption during January-June may continue at near last years 163 million bushels consumed in that period.

Barley exports for 1973/74 probably will amount to around 80 million bushels, a little above last year and the highest level since the early 1960's. Inspections for export through January 18 of 51 million bushels plus undelivered export sales to known destinations for the remainder of the season add to 72 million bushels.

Prices of feed barley at Minneapolis are running about $2.37 a bushel, about $1.00 more than a year ago. Because of the tight grain situation, barley prices will continue strong until more is known about the size of 1974 grain crops this summer.

HIGH-PROTEIN FEEDS

Protein Feed Outlook for 1973/74 Season

Domestic use of protein feed (soybean meal equivalent) in 1973/74 is estimated at 20 million tons, 8% above the volume fed during 1972/73, which was the smallest in 6 years. High-protein animal units (HPAU's) are forecast at 141 million, 1% above 1972/73, the sharpest annual rise since 1966/67 when they jumped 5%. Comparing the protein feed supply with the HPAU's gives a feed disappearance of 284 pounds per unit, 16 pounds more than in 1972/73 but still below the peak 292 pounds reached in 1969/70.

The use of urea in feed in 1972/73 was estimated at around 950,000 tons, a sharp increase of 15% above 1971/72. The increase was largely triggered by tight supplies and extremely high fluctuating prices of natural protein feed. Urea prices (42% at Ft. Worth) during most of 1972/73 ranged between $67 and $83 per ton, much more stable than soybean meal. However, early 1974 nitrogen fertilizer prices have

High-protein feeding

Period	Quantity fed[1]		Price index	
	1972/73	1973/74	1972/73	1973/74
	Million tons	*Million tons*	*1967=100*	
Oct.-Dec.	5.3	5.0	167	233
Jan.-Mar.	4.7		250	
Apr.-June	4.4		349	
July-Sept.	4.2		321	
Oct.-Sept. Sea.	18.6	20.0	272	
HPAU (Mil.)[2]	139.1	[3]141.0		
Fed per AU (Lb.)	267	[3]284		

[1] Soybean meal equivalent. [2] High-protein animal units. [3] Forecast January 1974.

about doubled since last year, and urea (a major nitrogen source) prices at Ft. Worth currently are running about $123 per ton, virtually double those of a year ago.

The long-run expansion in urea feeding may be at least temporarily halted in 1973/74 as cattle and sheep feeders turn more to soybean and cottonseed meals, which are in good supply with more stable prices than urea.

Domestic use of soybean meal in 1973/74 is estimated at 13.2 million tons, although a tenth above 1972/73, this volume of usage only approaches the high consumption levels in 1969-71 in which HPAU's averaged slightly less than the present forecast of animal units for 1973/74. Thus, even with the tight urea feed situation, there still may be some reluctance on the part of feeders for a massive shift back to natural protein in view of their experience with short supplies and high prices during 1972/73. In addition, some feeders (especially some dairymen) have adjusted their feeding program by omitting the use of protein supplements when good quality grain and high-protein roughages were available.

Prices of soybean meal (44% at Decatur) are running about $165-$180 per ton, approximately $20-25 under those of a year ago. The larger supply of soybeans will continue to have a stabilizing effect on meal prices until more is known about the outcome of the 1974 bean crop. If the crop turns out as presently projected (1,550 million bushels) and barring new developments in export demand, meal over the next few months may hover around $175 per ton (f.o.b. Decatur).

Cottonseed crushings so far this year are near a year earlier, although total cottonseed supplies are slightly larger. Deliveries of cottonseed to oil mills have begun to rise, however, and for the whole season are expected to total 5.2 million tons, not much changed from last season. Domestic production of cottonseed meal in 1973/74 is estimated at 2.4 million tons, 8% above last year. Mills usually crush about 95% of the cottonseed crop, but held the crush down 90% in 1972/73 as stocks of old crop cottonseed carried over on August 1 were an unusually large 0.5 million tons.

Cottonseed meal supplies and prices

Feeding year	Production	Domestic use[1]	Prices Memphis 41% expeller
	1,000 tons	*1,000 tons*	*Dol. per ton*
October - September			
1970/71	1,762	1,693	73.40
1971/72	1,842	1,885	76.30
1972/73	2,267	2,225	161.20
October - December			
1970	632	584	75.10
1971	590	578	69.80
1972	671	653	123.30
1973	631	601	160.50

[1] Derived from stocks, production and foreign trade.

Fishmeal supplies are expected to be tight all year. Anchovy fishing in Peru, the largest source of fish meal supplies, likely will continue to be limited. The Peruvian government halted all exports of fishmeal and fish oil at the end of November, presumably to conserve sharply reduced supplies for domestic use. One estimate puts Peruvian fishmeal production at 1.2 million tons for 1974. This compares with annual production of about 2 million tons in recent years before the decline in anchovy supplies. However, the volume of fishmeal production in 1974 will depend on how fishing conditions develop through the year and what restraints may be placed on the size of the catch by the government. U.S. imports of fishmeal during October-December totaled 8 thousand tons, only about 15% of the volume imported a year earlier.

Production of meat meal and tankage feeds in the first quarter of 1973/74 was running close to last year's pace of 466,000 tons, despite reduced livestock slaughter in that period. Prices of meat meal and tankage also are higher than usual when related to

Fishmeal supplies and prices

Feeding year	Production	Imports	Total	Prices East Coast
	1,000 tons	*1,000 tons*	*1,000 tons*	*Dol. per ton*
October - September				
1970/71	355	254	609	173.20
1971/72	348	404	752	172,70
1972/73	373	114	487	405.80
October - December				
1970	54	36	90	188.40
1971	48	65	113	157.80
1972	61	53	114	239.60
1973	64	8	72	491.70

soybean meal. This is largely due to a super demand placed on meat meal and tankage because of its high mineral content and tightness in dicalcium phosphate supplies.

MOLASSES

Domestic Production Smaller; Prices High

U.S. molasses supplies (production plus imports) for the 1973/74 feeding year are projected at 810 million gallons, around 40 million gallons or 5% less than in 1972/73 (table 23) Production from domestic sources of cane, beet, citrus and corn is estimated at 385 million gallons, 10% less than in 1972/73. Most of this drop will be beet molasses, because of a 15% smaller sugar beet crop. Cane molasses also may be down about 8% because of smaller cane crops in both Florida and Louisiana.

The final outcome of supplies for 1973/74, of course, will depend on the volume imported during the season. In 1972/73, about 420 million gallons were imported, down slightly from 1971/72 but considerably more than our projection. Most of the heavy movement into this country occurred in the last half of the 1972/73 season, and may have been in response to the high soybean meal prices and increased urea feeding. Molasses is an excellent carbohydrate base and is needed when urea is added to cattle and sheep rations.

Like other feed ingredients, molasses prices have skyrocketed to unprecedented levels. Last year, (October-September 1972/73), feed molasses at Chicago soared to an average of 36¢ a gallon, compared with stable 18-21¢ prices for most earlier years. Prices have continued to climb; during October-January they averaged 48¢ a gallon, almost double those of a year earlier. If there is a significant withdrawal of urea from cattle rations this season because of urea's high prices and tight supply, this could possibly temper any further substantial rises in molasses prices. But with smaller molasses supplies, especially from domestic sources, and high cattle prices, molasses prices may continue to be relatively high for the next several months.

DICALCIUM PHOSPHATE

Supply Short

Available supplies of phosphorus for use as a mineral supplement mainly in hog and poultry feed mixtures are below expected requirements for 1974. Requirements for 1974 are estimated at 1.6 million tons, the equivalent of 18.5% phosphorus. An estimate of the total prospective supply of such materials is 1.3 million tons, indicating a shortage of about 300,000 tons for the year.

Livestock and poultry animals require calcium and phosphorus as bone builders. Cattle usually get enough of these minerals from roughage and concentrates, but pigs and poultry must be fed a supplement containing calcium and phosphorus for proper growth. Principal sources of these minerals as supplements are dicalcium phosphate, phosphate rock, milk, bones, bone meal, and fish meal. The scarcity of phosphorus is the more urgent problem, since calcium can be supplied from limestone, which is available in almost every State.

Dicalcium phosphate is made by neutralizing phosphoric acid with limestone or lime, and phosphoric acid is in short supply. The energy shortage also contributes by limiting the use of natural gas in the processes.

Use of phosphoric acid for manufacturing dicalcium phosphate is limited because the same material is used in manufacturing high analysis phosphate fertilizers. Production of dicalcium phosphate is a complex chemical process requiring elimination of most of the fluorine found in all U.S. phosphate rock and the wet process acid made from U.S. rock. Thus, processing costs are higher for dicalcium phosphate for use in mixed feeds than for phosphate fertilizers in which neither the acid nor the rock is defluorinated.

In January prices of concentrated superphosphate for fertilizer were around 15% higher than prices of dicalcium phosphate.

HAY

Disappearance Even for May-December

Hay disappearance in May-December 1973 totaled 65½ million tons, virtually the same as a year ago. Despite the 1973/74 record hay supply, disappearance of hay per roughage-consuming animal unit (R C A U) in that period fell sharply from that of recent years. In May-December, hay disappearance totaled 0.61 ton per animal unit compared with 0.65 ton in that period of 1972 (table 25). Mild weather last fall plus zooming hay prices were major factors contributing to the lower disappearance rate. The number of RCAU's for 1973/74 is forecasted at 106.9 million, 7% more than in 1972/73.

If hay usage during January-April is about 0.62 ton per animal unit, as expected, 1973/74 disappearance will total around 131 million tons, leaving carryover on May 1, about 27 million tons, up 13% from a year earlier.

Prices received by farmers for their 1973 hay crop are expected to average about $41 per ton, the highest ever. Higher prices were general throughout the country, but price rises during the summer were sharpest in the West and Northwest which suffered from drought. Strong demand in the livestock-feed complex point to continued high prices of hay at least until new-crop cuttings begin in the spring, which could bring some seasonal decline.

Table 2.--Grain sorghum and feed grains (total): Acreage, supply, distribution, and prices 1969-74

Item	Grain Sorghum						Feed grains (corn, sorghum oats and barley)					
	1969/70	1970/71	1971/72	1972/73 prel.	1973/74 fore-cast 1/	1974/75 pro-jected	1969/70	1970/71	1971/72	1972/73 prel.	1973/74 fore-cast 1/	1974/75 pro-jected
Acreage (Mil.)												
Base or allotment	24.7	24.7	24.7	23.7	23.9	---	133.0	133.0	132.9	129.8	130.0	89.0
Set-aside	7.5	7.4	4.1	7.3	2.0	0	39.1	37.4	18.2	36.6	9.1	0
Planted	17.2	17.0	20.8	17.3	19.3	19.6	115.3	118.8	127.8	115.1	121.4	127.0
Harvested for grain	13.4	13.6	16.3	13.4	15.9	16.0	95.5	99.3	106.3	94.0	102.3	107.7
			Bushels						Tons			
Yield per acre	54.3	50.4	53.7	60.5	58.8	58.0	1.86	1.61	1.95	2.13	2.00	2.18
			Million bushels						Million short tons			
Supply												
Carryin 2/	287	244	90	142	73	66	50.2	48.6	33.2	48.4	32.4	26.6
Production	730	684	876	809	937	928	177.4	160.1	207.7	199.9	205.0	234.8
Imports	---	---	---	---	---	---	.4	.4	.5	.4	.4	.4
Total	1,017	928	966	951	1,010	994	228.0	209.1	241.4	248.7	237.8	261.8
Disappearance												
Feed	638	684	692	660	738	717	141.8	138.9	149.0	156.2	154.1	164.6
Food, Industry and Seed	9	10	9	6	6	8	16.4	16.3	16.7	17.0	17.3	17.6
Total domestic	647	694	701	666	744	725	158.2	155.2	165.7	173.2	171.4	182.2
Exports	126	144	123	212	200	175	21.2	20.7	27.3	43.1	39.8	36.7
Total	773	838	824	878	944	900	179.4	175.9	193.0	216.3	211.2	218.9
Carryout												
Government 3/	184	68	92	13 *	---		27.8	19.0	30.5	10.7 **	---	
"Free"	60	22	50	60	---		20.8	14.2	17.9	22.7	---	
Total	244	90	142	73	66	94	48.6	33.2	48.4	32.4	26.6	42.9
Price support and season price				Dollars per cwt.					1967=100			
National av. loan rate	1.61	1.61	1.73	1.79	1.79	1.88						
Support payment 4/	.28	.33	.31	.64	.36							
Received by farmers	1.91	2.04	1.87	2.45	3.80		97	110	96	141	*** 199	
Kansas City No. 2 Yellow, milo	2.07	2.32	2.05	3.24	*** 4.44							

1/ Based on January 1 indications. 2/ October 1 corn and sorghum; July 1 oats and barley. 3/ Under loan and uncommitted CCC inventory.

4/ Average earned on sorghum produced. * Includes 7 million bushels committed for sale by CCC. ** Includes 3.2 million tons committed for sale by CCC. *** October - January average.

Table 3 .--Oats and barley: Acreage, supply, distribution, and prices, 1969-74

Item	OATS						BARLEY					
	1969/70	1970/71	1971/72	1972/73	1973/74 fore-cast 1/	1974/75 pro-jected	1969/70	1970/71	1971/72	1972/73	1973/74 fore-cast 1/	1974/75 pro-jected
Acreage (Mil.)												
Base or allotment	----------Not in program----------						18.0	18.0	18.0	18.0	17.3	---
Set-aside	0	0	0	0	0	---	4.4	3.9	0	4.9	1.4	0
Planted	23.6	24.5	22.0	20.2	19.2	19.0	10.3	105	11.1	10.6	11.3	9.6
Harvested for grain	18.0	18.6	15.8	13.5	14.1	14.0	9.6	9.7	10.2	9.7	10.5	8.9
Yield per acre (Bu.)	53.7	49.2	55.9	51.2	47.0	54.0	44.7	42.8	45.7	43.6	40.3	46.0
	Million bushels											
Supply												
Carryin (July 1)	379	499	517	541	410	276	201	236	155	175	163	139
Production	966	917	881	692	664	756	427	416	464	423	424	409
Imports	2	2	4	3	2	2	13	9	15	14	15	15
Total	1,347	1,418	1,402	1,236	1,076	1,034	641	661	634	612	602	563
Disappearance												
Feed	736	781	738	709	657	607	247	289	266	238	234	204
Food, Industry and Seed	107	102	99	93	93	93	141	139	142	145	149	156
Total domestic	843	883	837	802	750	700	388	428	408	383	383	360
Exports	5	18	24	24	50	30	17	78	51	66	80	80
Total	848	901	861	826	800	730	405	506	459	449	463	440
Carryout (June 30)												
Government *	296	359	372	221	---	---	116	90	79	50	---	
"Free"	203	158	169	189	---	---	120	65	96	113	---	
Total	499	517	541	410	276	304	236	155	175	163	139	123
Price support and season price	Dol. per bu.											
National av. loan rate	.63	.63	.54	.54	.54	.54	.83	.83	.86	.86	.86	.90
Support payment 2/	0	0	0	0	0		.06	.06	0	.23	.15	
Received by farmers	.584	.623	.605	.72	1.09		.885	.973	.993	1.22	2.04	
Minneapolis **	.64	.69	.66	.82	3/1.27		.98	1.11	1.04	1.21	3/2.03	

1/ Based on January 1 indications. 2/ Average earned on all barley produced. 3/ July-January average. * Under loan and owned by CCC on July 1, 1973, includes grain committed for sale by CCC and still carried as part of total inventory; in earlier years, included only grain not committed for sale. ** Oats No. 2 extra heavy white; barley No. 3 or better, feed.

Table 4.--Feed Grains: Domestic disappearance and exports, by quarters, United States, 1965-73

Year beginning October	October-December		January-March		April-June		July-September		Total October-September	
	Domestic disappearance	Exports 1/	Domestic disappearance	Exports 1/	Domestic disappearance	Exports 1/	Domestic disappearance	Exports 1/	Domestic disappearance	Exports 1/
	Million bushels									
	CORN									
1965	1,001	197	1,012	171	906	177	803	142	3,722	687
1966	1,163	140	847	126	874	107	814	114	3,698	487
1967	1,184	183	919	158	913	129	869	163	3,885	633
1968	1,192	158	1,135	71	849	134	790	173	3,966	536
1969	1,243	186	1,206	139	953	133	787	154	4,189	612
1970	1,234	156	1,103	121	881	93	759	147	3,977	517
1971	1,449	160	1,147	173	1,012	192	779	271	4,387	796
1972 2/	1,612	257	1,189	301	1,080	323	852	377	4,733	1,258
1973 2/	1,567	320								
	GRAIN SORGHUM									
1965	211	50	181	73	129	62	61	81	582	266
1966	210	75	230	65	132	59	42	49	614	248
1967	212	55	168	48	128	21	37	42	545	166
1968	250	28	184	16	137	20	55	42	626	106
1969	300	29	152	33	142	15	53	49	647	126
1970	266	51	203	52	167	12	58	29	694	144
1971	239	19	199	30	177	27	86	47	701	123
1972 2/	283	47	200	58	124	39	59	68	666	212
1973 2/	306	56								
	OATS									
1965	144	13	226	2	208	13	276	9	854	37
1966	166	7	220	1	170	3	274	5	830	16
1967	130	1	208	2	172	2	276	3	786	8
1968	153	2	234	1	177	2	303	2	867	7
1969	143	1	210	1	186	1	309	2	848	5
1970	169	14	212	1	193	1	305	1	879	17
1971	147	3	197	11	188	9	302	3	834	26
1972 2/	151	2	192	2	157	17	252	17	752	38
1973 2/	152	19								
	BARLEY									
1965	68	22	94	15	67	23	96	15	325	75
1966	87	10	81	7	74	13	102	13	344	43
1967	75	7	77	9	81	2	104	3	337	21
1968	84	4	89	1	82	5	125	1	380	11
1969	83	1	95	3/	85	15	144	23	407	39
1970	94	17	101	23	88	15	128	5	411	60
1971	91	10	106	3	83	32	136	13	416	58
1972 2/	86	13	87	16	74	24	134	31	381	84
1973 2/	82	23								
	TOTAL FEED GRAINS (Million short tons)									
1965	37.8	7.7	39.3	7.2	33.9	7.5	30.9	6.7	141.9	29.1
1966	43.2	6.4	35.6	5.5	32.7	5.0	30.8	5.0	142.3	21.9
1967	43.0	6.8	35.6	6.0	33.8	4.3	32.3	5.9	144.7	23.0
1968	44.8	5.3	42.8	2.5	32.4	4.4	31.5	6.2	151.5	18.4
1969	47.5	6.1	43.7	4.8	35.7	4.5	31.9	6.3	158.8	21.7
1970	47.0	6.4	42.4	5.4	34.5	3.3	30.8	5.1	154.7	20.2
1971	51.8	5.3	43.4	5.9	38.3	7.0	32.3	9.3	165.8	27.5
1972 2/	57.5	8.9	44.1	10.5	38.0	11.0	32.8	13.5	172.4	43.9
1973 2/	56.8	11.4								

1/ Includes grain equivalent of products.
2/ Preliminary.
3/ Less than 500,000 bushels.

Table 5.--Feed grain stocks: Government and "free" January 1, 1973 and 1974

Item	Corn 1973	Corn 1974	Grain sorghum 1973	Grain sorghum 1974	Oats 1973	Oats 1974	Barley 1973	Barley 1974	Total 4 feed grains 1973	Total 4 feed grains 1974
	Million bushels								Mil. tons	
Under Loan										
Old grain resealed	492	6	38	*	173	34	62	8	19.1	.9
Under price support from preceding crop 1/	241	180	19	14	26	9	35	12	8.5	5.9
CCC-total inventory	157	70	38	7	174	121	10	1	8.5	4.1
Total Government	890	256	95	21	373	164	107	21	36.1	10.9
"Free"	3,941	4,209	526	627	403	470	255	302	137.7	150.2
Total stocks	4,831	4,465	621	648	776	634	362	323	173.8	161.1

1/ Total placed under loan, less repayments through December 31. * Less than 500,000 bushels.

Government stocks from operating reports of the Agricultural Stabilization and Conservation Service.

Table 6.--Feed grain stocks owned by Commodity Credit Corporation, 1969-74 1/ (1st of month)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Million bushels											
	CORN											
1971	115	108	103	102	100	97	90	89	88	97	128	136
1972	145	149	152	153	154	155	154	154	157	156	153	140
1973	117	83	65	16	2/	2/	2	1	3	4	4	4
1974	4	4										
	GRAIN SORGHUM											
1971	142	131	126	120	111	92	78	69	66	63	61	59
1972	53	51	50	49	48	47	46	47	41	39	38	34
1973	27	21	16	14	13	10	9	5	5	5	5	5
1974	0	0										
	OATS											
1971	137	137	137	137	138	141	169	191	196	197	197	174
1972	174	173	173	173	172	174	178	183	179	173	171	168
1973	162	157	153	151	145	113	105	88	83	83	33	31
1974	31	30										
	BARLEY											
1971	23	23	23	23	23	23	29	34	36	36	35	0
1972	0	0	0	0	0	0	1	5	6	4	4	4
1973	3	3	3	3	2	1	1	1	1	1	1	1
1974	1	1										

1/ CCC uncommitted inventory. 2/ Less than 500,000 bushels.

Compiled from reports of Agricultural Stabilization and Conservation Service, USDA

Table 7.--Feed grain stocks, quarterly distribution, 1971-74

Year	Farm	Commodity Credit Corporation 1/	Terminal market, mill elevator and warehouse	Total	Farm	Commodity Credit Corporation 1/	Terminal market, mill elevator and warehouse	Total
	Million bushels							
	CORN							
	January 1				April 1			
1971	2,755	98	916	3,769	1,875	59	611	2,545
1972	3,551	30	1,119	4,700	2,483	29	869	3,381
1973 2/	3,689	26	1,116	4,831	2,385	25	930	3,340
1974 2/	3,353	18	1,094	4,465				
	July 1				October 1 3/			
1971	1,179	36	357	1,572	427	25	215	667
1972	1,592	28	556	2,176	751	26	349	1,126
1973 2/	1,373	23	541	1,937	405	20	284	709
	GRAIN SORGHUM							
	January 1				April 1			
1971	152	5	454	611	88	3	265	356
1972	245	*	464	709	143	1	336	480
1973 2/	219	*	402	621	95	*	268	363
1974 2/	221	*	427	648				
	July 1				October 1 3/			
1971	36	1	140	177	13	1	76	90
1972	67	*	208	275	31	*	111	142
1973 2/	46	*	154	200	14	*	59	73
	OATS							
	January 1				April 1			
1971	712	11	199	922	510	11	188	709
1972	693	11	239	943	507	11	218	736
1973 2/	556	8	212	776	377	7	200	584
1974 2/	473	5	156	634				
	July 1 3/				October 1			
1971	316	11	190	517	813	11	269	1,093
1972	336	10	195	541	679	9	240	928
1973 2/	229	7	174	410	606	6	193	805
	BARLEY							
	January 1				April 1			
1971	238	5	137	380	142	5	110	257
1972	255	4	133	392	166	4	114	284
1973 2/	246	*	116	362	161	*	97	258
1974 2/	209	0	114	323				
	July 1 3/				October 1			
1971	80	5	70	155	318	4	167	489
1972	107	1	67	175	322	*	132	454
1973 2/	89	0	74	163	286	0	138	424

1/ CCC owned at binsites excludes grain owned by CCC in other positions. 2/ Preliminary. 3/ Old crop grain only. *Less than 500,000 bushels.

Table 8.--Corn: Acreage, yield and production, 1970-73

Crop	North Atlantic	East North Central	West North Central	South Atlantic	South Central	Western	United States
	Acreage harvested for grain (Millions)						
1970	1.3	21.2	26.1	4.9	3.1	0.8	57.4
1971	1.5	23.1	29.8	5.3	3.5	0.8	64.0
1972	1.2	21.1	27.0	4.6	2.8	0.7	57.4
1973 1/	1.5	21.7	29.5	5.1	3.1	0.9	61.8
	Yield per harvested acre (Bushels)						
1970	87.7	76.3	75.9	46.7	45.2	88.8	72.4
1971	75.3	99.2	88.3	57.9	63.4	95.0	88.1
1972	73.3	102.0	101.6	68.0	72.1	107.1	97.1
1973 1/	76.7	95.8	94.8	67.3	72.6	95.6	91.4
	Production (Million bushels)						
1970	114	1,618	1,980	229	140	71	4,152
1971	113	2,292	2,631	307	222	76	5,641
1972	88	2,153	2,742	313	202	75	5,573
1973 1/	115	2,078	2,796	343	225	86	5,643

1/ Preliminary.

Table 9.--Grain sorghum: Acreage, yield and production, 1970-73

Crop	Texas	Oklahoma	Kansas	Nebraska	New Mexico	Other States	United States
	Acreage harvested for grain (Thousands)						
1970	5,886	555	3,560	1,480	276	1,811	13,568
1971	5,827	750	4,325	2,057	353	2,989	16,301
1972	5,420	630	3,500	1,640	297	1,881	13,368
1973 1/	6,950	696	3,900	2,060	363	1,971	15,940
	Yield per harvested acre (Bushels)						
1970	56.0	42.0	41.0	51.0	56.0	52.5	50.4
1971	52.0	36.0	54.0	60.0	58.0	56.5	53.7
1972	59.0	43.0	62.0	72.0	65.0	57.4	60.5
1973 1/	60.0	44.0	56.0	68.0	54.0	56.3	58.8
	Production (Million bushels)						
1970	330	23	146	75	15	95	684
1971	303	27	234	123	20	169	876
1972	320	27	217	118	19	108	809
1973 1/	417	31	218	140	20	111	937

1/ Preliminary

Table 10.--Oats: Acreage, yield and production, 1970-73

Crop	North Atlantic	East North Central	West North Central	South Atlantic	South Central	Western	United States
			Acreage harvested for grain (Millions)				
1970	.8	3.6	11.3	.4	1.2	1.3	18.6
1971	.8	3.4	9.9	.4	.6	.7	15.8
1972	.7	2.7	8.4	.3	.7	.7	13.5
1973 1/	.7	2.9	8.5	.3	1.0	.7	14.1
			Yield per harvested acre (Bushels)				
1970	60.0	59.4	46.5	45.0	44.2	44.6	49.2
1971	53.8	60.3	56.2	52.5	36.7	48.6	55.9
1972	44.3	57.0	51.5	43.3	38.6	48.6	51.2
1973 1/	52.9	45.2	48.0	50.0	42.0	44.3	47.0
			Production (Million bushels)				
1970	48	214	526	18	53	58	917
1971	43	205	556	21	22	34	881
1972	31	154	433	13	27	34	692
1973 1/	37	131	408	15	42	31	664

1/ Preliminary.

Table 11.--Barley: Acreage, yield and production, 1970-73

Crop	North Atlantic	East North Central	West North Central	South Atlantic	South Central	Western	United States
			Acreage harvested for grain (Millions)				
1970	.2	.1	3.2	.3	.8	5.1	9.7
1971	.2	.1	3.8	.4	.7	5.0	10.2
1972	.2	.1	4.2	.3	.4	4.5	9.7
1973 1/	.2	.1	4.4	.3	.4	5.1	10.5
			Yield per harvested acre (Bushels)				
1970	50.0	40.0	34.1	53.3	40.0	48.0	42.8
1971	55.0	50.0	45.0	42.5	30.0	47.8	45.7
1972	45.0	40.0	39.5	46.7	35.0	48.0	43.6
1973 1/	40.0	30.0	38.6	46.7	35.0	42.2	40.3
			Production (Million bushels)				
1970	10	4	109	16	32	245	416
1971	11	5	171	17	21	239	464
1972	9	4	166	14	14	216	423
1973 1/	8	3	170	14	14	215	424

1/ Preliminary.

Table 12.--U.S. corn exports, to selected countries, 1970-73

(Grain only)

Country	Year beginning October				
	1970/71	1971/72	1972/73	Oct.-Dec. 1972	Oct.-Dec. 1973
	Million Bushels				
Traditional countries importing U.S. corn					
Large Imports--"usually"					
Japan	116	111	262	44	61
Netherlands	98	103	143	28	25
Italy	47	91	112	21	21
Germany, West	50	56	78	21	28
United Kingdom	51	54	64	18	11
Spain	1	38	67	20	25
Belgium-Luxembourg	26	15	15	5	1
Canada	9	10	1/ 32	19	8
Total	398	478	773	176	180
Medium Imports--"usually"					
Korea	15	17	17	6	4
Yugoslavia	8	16	2	2	0
Germany, East	7	12	--	0	2
Czechoslovakia	8	3	2/	0	1
Poland	9	11	24	4	6
Greece	9	7	3	0	10
Portugal	14	18	18	2	4
Total	70	84	64	14	27
Small Imports--"usually"					
Israel	4	3	5	2	2
Norway	0	2	4	1	0
Mexico	1	1	35	0	4
France	2	2/	1	2/	2/
Lebanon	2/	5	2	2	0
Ireland	2/	1	5	4	0
Vietnam, South	2	4	4	1	2/
India	1	1	2/	0	0
Egypt	1	5	6	0	1
Canary Islands	2	4	4	1	1
Philippines	1	6	2	1	2/
Romania	2/	7	3	0	0
Singapore	2/	2/	4	1	0
Tanzania	1	4	2/	2/	2/
Iran	1	1	5	2/	0
Chile	2	8	6	3	1
Indonesia	2/	2/	7	0	2/
Taiwan	1	9	0	0	3
Morocco	2/	2/	1	0	2/
Total	19	61	94	22	12
New countries importing U.S. corn					
USSR	0	136	132	15	48
China, People's Republic of	0	0	48	15	24
Total	0	136	180	30	72
Other	14	26	31	11	25
Grand Total	501	785	1,142	253	316

1/ For consumption within the country February and March 1973 imports estimated. 2/ Less than 500,000 bushels.

Table 13.--Corn exports (grain only)
(Year beginning October)

Destination	1971/72	1972/73 (Prelim.)	1973/74 Exported Oct.-Dec. 1973	1973/74 Jan.-Sept. 1974 Bookings 1/	1973/74 Season Total
		Million bushels			
European Community	311	418	85	245	330
Other West Europe	68	112	39	77	116
East Europe	49	29	7	48	55
USSR	115	132	48	97	145
Japan	110	262	61	208	269
Republic of China (Taiwan)	9	20	3	6	9
Peoples Republic of China	0	48	24	77	101
India	1	*	0	0	0
Other Asia	27	49	2	19	21
Africa	15	13	3	*	3
Western Hemisphere	70	114	21	15	36
Subtotal	775	1,197	293	792	1,085
Other	11	45	23	158	181
Grand Total	786	1,242	316	950	1,266

1/ Based on undelivered reported sales. 2/ Unidentified; probably includes substantial "double counting" because of sales to buyers who have purchased for resale. * Less than 500 thousand bushels.

Table 14.--Feed grain exports for 1973/74 1/

Grain	Unit	Exported thru. Jan. 25	Exports bookings thru Jan. 27 (grain only): Identified destination	Exports bookings thru Jan. 27 (grain only): Unidentified destination	Total, exported and booked for export	USDA Forecast 2/
Corn	Mil. bu.	403	869	156	1,428	1,125
Grain sorghum	"	69	140	15	224	200
Oats	"	36	20	8	64	50
Barley	"	53	36	17	106	80
Total	Mil. tons	15.1	29.4	5.3	49.8	39.8

1/ Marketing year beginning October for corn and sorghum; July for oats and barley.
2/ Includes grain equivalent of products; based on inspections for export.

Table 15.--Corn and grain sorghum: Cash prices at principal markets, 1965-74

Year beginning October	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Simple average
	Dollars												
	Corn, No. 2 Yellow, Chicago (per bushel)												
1965	1.23	1.16	1.24	1.32	1.31	1.28	1.28	1.31	1.33	1.43	1.49	1.46	1.32
1966	1.40	1.35	1.45	1.42	1.41	1.41	1.38	1.39	1.38	1.31	1.23	1.20	1.36
1967	1.17	1.10	1.14	1.13	1.15	1.17	1.16	1.19	1.15	1.13	1.08	1.09	1.14
1968	1.09	1.15	1.16	1.20	1.18	1.17	1.24	1.32	1.31	1.29	1.30	1.24	1.22
1969	1.21	1.18	1.19	1.26	1.26	1.24	1.28	1.32	1.37	1.38	1.46	1.52	1.31
1970	1.42	1.42	1.54	1.59	1.57	1.55	1.51	1.52	1.57	1.48	1.29	1.16	1.47
1971	1.10	1.07	1.22	1.22	1.21	1.22	1.26	1.28	1.25	1.29	1.29	1.40	1.23
1972	1.32	1.33	1.57	1.58	1.59	1.59	1.65	2.01	2.42	2.52	2.91	2.47	1.91
1973	2.37	2.50	2.68	2.90									
	Grain Sorghum, No. 2 Yellow, Kansas City (per cwt.)												
1965	1.86	1.87	1.92	1.97	2.00	1.95	1.95	1.95	1.96	2.11	2.13	2.10	1.98
1966	1.99	2.03	2.10	2.10	2.10	2.17	2.14	2.16	2.21	2.21	2.02	2.07	2.11
1967	1.90	1.89	1.93	2.03	2.10	2.10	2.07	2.04	1.97	1.91	1.76	1.77	1.96
1968	1.82	1.91	1.89	1.94	1.93	1.92	1.96	2.00	2.02	2.06	2.09	2.08	1.97
1969	2.08	2.06	2.05	2.06	2.04	1.96	2.00	1.96	2.03	2.09	2.18	2.29	2.07
1970	2.22	2.12	2.27	2.37	2.35	2.32	2.41	2.46	2.58	2.53	2.25	1.91	2.32
1971	1.80	1.91	2.06	2.06	2.07	2.07	2.09	2.08	2.09	2.11	2.05	2.21	2.05
1972	2.17	2.42	2.88	3.06	2.88	2.86	2.83	3.09	3.61	3.93	4.72	4.37	3.24
1973	4.37	4.31	4.37	4.71									

Source: Grain Market News, AMS, USDA

Table 16--Oats and barley: Cash prices at principal markets, 1965-74

Year beginning July	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Simple average
	Dollars per bushel												
	Oats, No. 2 Extra Heavy White, Minneapolis												
1965	.65	.64	.65	.66	.67	.67	.69	.69	.68	.67	.69	.69	.67
1966	.70	.71	.74	.75	.74	.73	.73	.70	.72	.72	.72	.72	.72
1967	.70	.67	.68	.70	.70	.70	.72	.73	.73	.75	.74	.70	.71
1968	.65	.59	.63	.64	.67	.66	.68	.69	.66	.65	.65	.60	.65
1969	.60	.58	.61	.65	.66	.65	.65	.65	.63	.65	.66	.65	.64
1970	.62	.65	.70	.69	.72	.71	.72	.72	.67	.67	.71	.70	.69
1971	.63	.61	.64	.64	.66	.68	.69	.69	.66	.67	.70	.70	.66
1972	.69	.70	.71	.76	.81	.91	.88	.84	.84	.86	.91	.93	.82
1973	.93	1.28	1.32	1.26	1.25	1.32	1.55						
	Barley, No. 3 or Better, Feed, Minneapolis												
1965	1.12	1.12	1.16	1.19	1.20	1.20	1.23	1.29	1.28	1.23	1.21	1.20	1.20
1966	1.20	1.19	1.22	1.23	1.23	1.22	1.21	1.18	1.20	1.21	1.24	1.23	1.21
1967	1.20	1.16	1.14	1.14	1.13	1.12	1.16	1.15	1.13	1.12	1.14	1.10	1.14
1968	.99	.92	1.02	1.04	1.02	.98	.99	1.02	1.02	1.04	1.06	1.02	1.01
1969	.98	.87	.94	.95	.96	.96	.95	.95	1.00	1.03	1.08	1.08	.98
1970	1.01	1.00	1.08	1.09	1.08	1.13	1.16	1.22	1.15	1.13	1.15	1.08	1.11
1971	1.00	.95	.99	1.04	1.04	1.04	1.07	1.07	1.05	1.06	1.08	1.05	1.04
1972	.96	.98	1.11	1.16	1.14	1.27	1.34	1.20	1.19	1.25	1.36	1.51	1.21
1973	1.67	2.12	2.12	2.02	1.80	2.12	2.34						

Source: Grain Market News, AMS, USDA

Table 17.--Corn and grain sorghum: Average price received by farmers, United States, by months, 1967-74

Year beginning October	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Average weighted by sales 1/
	Dollars												
	CORN, per bushel												
1967	1.04	.975	1.03	1.04	1.06	1.06	1.06	1.09	1.07	1.04	.986	1.01	1.03
1968	.962	1.04	1.05	1.08	1.09	1.09	1.12	1.19	1.18	1.18	1.18	1.15	1.08
1969	1.12	1.07	1.09	1.12	1.14	1.13	1.15	1.18	1.21	1.24	1.27	1.38	1.15
1970	1.34	1.29	1.36	1.42	1.43	1.43	1.41	1.38	1.43	1.36	1.19	1.11	1.33
1971	1.00	.974	1.08	1.09	1.09	1.10	1.13	1.15	1.13	1.14	1.15	1.22	1.08
1972	1.19	1.20	1.42	1.39	1.35	1.37	1.42	1.61	1.99	2.03	2.68	2.15	1.57
1973	2.17	2.18	2.39	2.39									2/2.37
	GRAIN SORGHUM, per 100 pounds												
1967	1.68	1.68	1.73	1.75	1.86	1.86	1.83	1.84	1.80	1.74	1.63	1.62	1.77
1968	1.60	1.68	1.72	1.74	1.77	1.76	1.76	1.81	1.81	1.82	1.92	1.97	1.70
1969	1.91	1.94	1.92	1.92	1.92	1.87	1.80	1.80	1.80	1.92	1.91	2.07	1.91
1970	2.02	2.02	2.04	2.10	2.16	2.17	2.19	2.33	2.43	2.37	2.27	2.01	2.04
1971	1.76	1.78	1.86	1.89	1.86	1.87	1.87	1.88	1.90	1.98	2.05	2.11	1.87
1972	2.09	2.19	2.72	2.72	2.60	2.60	2.56	2.66	3.10	3.46	3.64	3.87	2.45
1973	3.65	3.66	3.83	4.03									2/3.80

1/ Includes an allowance for unredeemed loans and purchase agreement deliveries valued at the average loan rate, by States. 2/ Preliminary.

Table 18.--Oats and barley: Average price per bushel received by farmers, United States, by months, 1967-74

Year beginning July	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Average weighted by sales 1/
	Dollars												
	OATS												
1967	.669	.622	.638	.647	.651	.661	.667	.686	.687	.694	.692	.694	.659
1968	.606	.533	.561	.582	.603	.607	.625	.644	.621	.614	.624	.625	.598
1969	.580	.526	.546	.571	.578	.580	.587	.591	.581	.588	.602	.613	.584
1970	.580	.567	.610	.613	.632	.650	.668	.675	.658	.634	.660	.707	.623
1971	.626	.555	.574	.581	.595	.622	.638	.636	.638	.635	.638	.666	.605
1972	.655	.623	.645	.671	.700	.806	.811	.776	.771	.774	.796	.904	.723
1973	.855	1.13	1.09	1.14	1.13	1.20	1.32						2/1.09
	BARLEY												
1967	1.06	1.01	.983	.991	.981	.987	.993	.997	.972	.963	.986	.983	1.01
1968	.931	.814	.876	.889	.902	.918	.915	.925	.903	.922	.975	1.04	.921
1969	.953	.822	.858	.879	.898	.910	.894	.860	.831	.829	.898	.944	.885
1970	.902	.849	.906	.934	.964	1.02	1.02	1.03	1.02	1.03	1.12	1.15	.973
1971	1.07	.868	.919	.960	1.02	1.04	1.04	1.01	.983	.990	1.04	1.09	.993
1972	1.04	.956	1.07	1.17	1.21	1.32	1.42	1.34	1.31	1.31	1.39	1.55	1.22
1973	1.58	2.10	2.16	2.23	2.10	2.19	2.32						2/2.04

1/ Includes an allowance for unredeemed loans and purchase agreement deliveries valued at the average loan rate, by States.
2/ Preliminary.

Table 19--Livestock, poultry and milk-feed price ratios, by months, 1968-74

Year beginning October	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Average
HOG/CORN, U.S. Basis 1/													
1968	18.6	16.8	17.0	17.3	18.0	16.3	17.6	18.7	20.3	21.1	21.9	21.7	18.9
1969	22.1	23.4	23.7	23.6	24.1	22.7	20.7	19.5	19.2	19.2	17.0	14.3	20.8
1970	13.4	11.9	11.1	10.8	13.4	[illegible]	11.3	12.3	12.3	14.0	15.5	16.1	[illegible]
1971	19.5	19.3	18.2	20.9	23.5	21.2	19.9	21.7	22.7	24.1	24.3	23.0	21.5
1972	23.0	22.3	20.8	22.3	25.3	28.0	24.7	21.9	18.7	20.2	21.1	20.4	22.4
1973 2/	18.0	18.5	16.0	15.5									
BEEF-STEER/CORN, Omaha 3/													
1968	22.6	22.9	23.5	[illegible]	22.8	23.5	24.0	25.4	26.6	25.2	24.6	24.3	24.0
1969	23.5	23.4	23.9	23.3	24.2	25.8	24.9	23.6	23.6	23.9	21.9	20.7	23.6
1970	21.2	20.1	18.5	19.7	21.8	21.8	22.3	22.3	21.6	22.6	26.4	26.0	22.2
1971	28.2	29.0	27.4	28.3	29.1	28.2	27.4	27.8	30.5	30.4	29.1	27.1	28.5
1972	27.1	24.9	24.6	26.8	27.6	30.2	29.5	24.9	21.5	20.6	19.6	19.0	24.7
1973 2/	17.7	16.3	19.5	17.1									
MILK/FEED, U.S. Basis 4/													
1968	1.85	1.86	1.83	1.80	1.76	1.73	1.69	1.65	1.61	1.65	1.70	1.80	1.74
1969	1.85	1.87	1.85	1.82	1.78	1.74	1.73	1.68	1.66	1.68	1.69	1.75	1.76
1970	1.79	1.81	1.75	1.72	1.70	1.67	1.63	1.60	1.57	1.61	1.66	1.76	1.69
1971	1.64	1.68	1.65	1.61	1.80	1.77	1.71	1.69	1.66	1.68	1.72	1.75	1.70
1972	1.83	1.80	1.62	1.55	1.54	1.54	1.51	1.38	1.22	1.29	1.18	1.47	1.49
1973 2/	1.54	1.61	1.53	[illegible]									
EGG/FEED, U.S. Basis 5/													
1968	9.6	9.9	10.7	10.9	9.9	10.1	9.3	7.6	7.8	9.4	8.9	10.0	9.5
1969	10.1	12.3	13.5	13.0	11.4	10.2	8.4	7.3	7.4	8.6	7.9	9.0	9.9
1970	7.4	8.3	[illegible]	8.0	7.4	7.3	7.3	6.7	6.4	6.4	7.1	7.1	7.4
1971	6.9	7.2	6.2	7.1	7.0	7.6	6.5	6.4	6.4	7.0	6.9	7.7	7.1
1972	6.9	8.0	8.5	8.9	7.3	7.7	7.9	6.9	6.4	7.0	8.4	8.7	7.7
1973 2/	9.3	8.6	[illegible]	8.9									
BROILER/FEED, U.S. Basis 6/													
1968	2.9	3.0	3.1	3.2	3.4	3.4	3.3	3.4	3.5	3.3	3.6	3.4	3.3
1969	3.3	3.2	3.0	3.2	3.0	3.1	2.9	2.9	2.9	2.8	2.8	2.7	3.0
1970	2.5	2.6	2.4	2.6	2.8	2.7	2.7	2.9	3.0	3.2	2.9	2.9	[illegible]
1971	2.7	2.7	2.5	2.8	3.1	3.1	2.7	2.8	3.0	3.3	3.0	3.2	2.9
1972	2.9	2.7	2.5	2.9	3.0	3.5	3.9	3.3	2.9	3.2	4.2	3.6	3.2
1973 2/	3.0	2.5	2.3	2.9									
TURKEY/FEED, U.S. Basis 7/													
1968	4.9	5.0	4.9	4.7	4.6	4.6	4.6	4.7	4.7	4.7	4.7	4.6	4.7
1969	[illegible]	5.3	5.6	5.4	5.4	5.6	5.5	5.2	5.0	4.8	4.7	4.6	5.2
1970	4.6	4.6	4.6	4.5	4.4	4.3	4.3	4.3	4.4	4.5	4.6	4.7	4.5
1971	4.7	4.8	5.1	4.9	4.8	4.7	4.6	4.5	4.5	4.4	4.4	4.3	4.6
1972	4.3	4.5	4.4	4.0	3.7	4.1	4.7	4.1	3.7	3.8	4.1	4.7	4.2
1973 2/	5.0	5.3	4.9	4.1									

1/ Number bushels of corn equal in value to 100 lbs. of hog liveweight. 2/ Preliminary. 3/ Based on price of beef-steers all grades sold out of first hands for slaughter and No. 2 Yellow corn. 4/ Pounds concentrate ration equal in value to one lb. whole milk. 5/ Number of lbs. of laying feed equal in value to one dozen eggs. 6/ Number of lbs. of broiler grower feed equal in value to one lb. broiler liveweight. 7/ Pounds of turkey grower feed equal in value to one lb. turkey liveweight.

Table 20--Corn, grain sorghum and barley: Price support payments, season average prices and average prices including payments, 1965-73

Item	Price support payments earned by program participants		All U. S. Farmers				Participants in Feed Grain Program		
	Total	Rate 1/	Production	Season average price	Average payment per bushel produced	Season average price plus payment	Production 2/	Average payment per bushel produced	U.S. Season average price plus payment
	Mil. dol.	Dol. per bu.	Mil. bu.	Dol. per bu.	Dol.	Dol. per bu.	Mil. bu.	Dol.	Dol. per bu.
CORN									
1965	333.9	.20	4,103	1.16	.08	1.24	1,956	.17	1.33
1966	449.0	.30	4,168	1.24	.11	1.35	1,775	.25	1.49
1967	428.5	.30	4,860	1.03	.09	1.12	2,175	.20	1.23
1968	514.4	.30	4,450	1.08	.12	1.20	2,146	.24	1.32
1969	584.9	.30	4,687	1.15	.13	1.28	2,434	.24	1.39
1970	583.1	.30	4,152	1.33	.14	1.47	2,091	.28	1.61
1971	893.1	.32	5,641	1.08	.16	1.24	4,791	.19	1.27
1972	1,468.9	*.40	5,573	1.57	.26	1.83	4,612	.32	1.89
1973 3/	910.0	**.32 .15	5,643	2.37	.16	2.53	5,137	.18	2.55
BARLEY									
1965	16.8	.16	393	1.02	.043	1.06	146	.12	1.14
1966	20.6	.20	392	1.06	.04	1.10	123	.17	1.23
1967	0	0	374	1.01	4/	1.01	4/	0	1.01
1968	0	0	426	.921	4/	.92	4/	0	.92
1969	23.9	.20	427	.885	.045	.93	159	.15	1.04
1970	26.5	.20	416	.973	.047	1.02	158	.17	1.14
1971	0	0	464	.993	.4/	.99	4/	0	.99
1972	107.2	*.32	423	1.22	.23	1.45	296	.36	1.58
1973 3/	78.0	**.26 .12	424	2.04	.15	2.19	322	.24	2.28
		Dol. per cwt.		Dol. per cwt.	Dol. per cwt.	Dol. per cwt.		Dol. per cwt.	Dol. per cwt.
GRAIN SORGHUM									
1965	80.5	.35	673	1.76	.21	1.97	444	.32	2.08
1966	116.1	.53	715	1.82	.29	2.11	463	.45	2.27
1967	113.9	.53	755	1.77	.27	2.04	559	.36	2.13
1968	113.9	.53	731	1.70	.27	1.97	476	.43	2.13
1969	119.1	.53	730	1.91	.28	2.19	465	.45	2.36
1970	129.3	.53	684	2.04	.33	2.37	431	.53	2.57
1971	167.0	.52	876	1.87	.31	2.18	873	.34	2.21
1972	289.3	*.57	809	2.45	.64	3.09	690	.42	2.87
1973 3/	183.0	**.54 .25	937	3.80	.36	4.16	876	.21	4.01

1/ Made on projected production of 50 percent of participant's base acreage. 2/ Production computed on the basis of acreage planted on participants' farms and U.S. average yield. Includes grain equivalent of silage and forage. 3/ Preliminary. 4/ Barley not included in acreage diversion program and not eligible for price support payments. *Payments earned for minimum set-aside requirements; program contained options for additional voluntary set-aside acreage at higher payment rates. ** Two set-aside options were in effect for the 1973 crop.

Table 21 .--Summary of results of the 1972 and 1973 Feed Grain Programs, United States

Item	Unit	1972 Program				1973 Program 1/			
		Corn	Grain sorghum	Barley	Total	Corn	Grain sorghum	Barley	Total
Number of farms 2/									
With feed grain base	Thous.	2,569	490	438	2,925	2,571	491	434	2,925
Participating 3/	do.	1,480	347	290	1,713	1,605	379	326	1,371
U.S. base acreage 4/	Mil. acres	88.1	23.7	18.0	129.8	88.8	23.9	17.3	130.1
Base acreage on participating farms	Mil. acres	71.5	20.5	13.6	105.6	77.0	21.8	15.3	114.1
Acreage set aside									
U.S. total	Mil. acres	24.4	7.3	4.9	36.6	6.0	2.0	1.4	9.4
Percentage of:									
Base acreage on participating farms	Pct.	34	36	36	35	8	9	9	8
Acreage planted									
U.S. total	Mil. acres	67.0	17.3	10.6	94.9	71.6	19.3	11.3	102.2
On participating farms	Mil. acres	47.5	11.4	6.8	65.7	56.2	14.9	8.0	79.1
Percent of total	Pct.	71	66	64	69	78	77	71	78
Set-aside payments:									
Minimum	Mil. dol.	1,144	220	83	1,447	910	183	78	1,171
Additional & optional	do.	325	69	24	418				
Total	do.	1,469	289	107	1,865	910	183	73	1,171

1/ Preliminary. 2/ Total farms are not the sum of the farms by kinds of grain since individual farms may produce more than one feed grain. 3/ Includes all farms earning a set-aside, price support, or substitute crop payment and farms diverting to substitute crops for which there was no set-aside payment. 4/ Based on 1959 and 1960 averages, including acreage in the Conservation Reserve Program and proven acreage.

Compiled from reports of Agricultural Stabilization and Conservation Service.

Table 22.--The soybean meal situation

Month	SOYBEANS											
	Crush			Exports			Stocks at processor's (1st of month)			Prices, monthly average, No. 1 yellow, Decatur		
	Cumulative											
	1971/72	1972/73 1/	1973/74 2/	1971/72	1972/73 1/	1973/74 2/	1971/72	1972/73 1/	1973/74 2/	1971/72	1972/73 1/	1973/74 2/
	Million bushels									Dol. per bu.		
October	59.5	66.8	62.8	29.4	54.3	46.6	33.5	12.3	89.5	3.01	3.30	5.62
November	119.3	137.5	134.5	76.8	115.5	121.0	119.1	91.3	125.8	2.98	3.61	5.57
December	183.3	206.7	207.2	127.1	165.2	179.0	146.9	111.1	115.5	3.06	4.07	5.92
January	247.2	277.3		169.5	212.9		127.1	117.4		3.05	4.46	
February	307.4	342.1		205.0	267.6		116.1	136.6		3.14	5.80	
March	371.3	406.5		236.3	326.7		125.1	133.3		3.35	6.15	
April	429.9	464.7		273.6	372.2		124.5	124.0		3.47	6.52	
May	492.9	526.4		305.3	413.2		114.6	107.9		3.47	8.94	
June	550.0	578.6		336.4	439.7		97.7	78.1		3.44	10.84	
July	608.2	623.1		362.7	453.9		90.9	58.5		3.48	8.47	
August	666.1	669.6		387.6	464.9		67.4	30.7		3.45	9.00	
September	718.3	711.0		402.6	472.4		38.1	13.5		3.45	6.10	
Season Total	718.3	711.0	790	402.6	472.4	540	3/72	3/60	3/240	3.28	6.44	4/5.70

Month	SOYBEAN MEAL											
	Production			Domestic use			Exports			Prices, monthly average, 44% Decatur		
	Cumulative											
	1971/72	1972/73 1/	1973/74 2/	1971/72	1972/73 1/	1973/74 2/	1971/72	1972/73 1/	1973/74 2/	1971/72	1972/73 1/	1973/74 2/
	Million tons									Dollars per ton		
October	1.4	1.6	1.5	1.2	1.3	1.1	.2	.3	.3	75	109	160
November	2.8	3.2	3.2	2.3	2.5	1.2	.5	.8	.5	74	123	167
December	4.3	4.8	4.8	3.3	3.6		1.0	1.2		81	174	192
January	5.8	6.5		4.4	4.7		1.4	1.8		83	188	
February	7.3	8.0		5.5	5.7		1.8	2.3		85	219	
March	8.8	9.5		6.6	6.7		2.1	2.8		91	200	
April	10.2	10.9		7.8	7.7		2.3	3.2		94	203	
May	11.7	12.3		8.9	8.7		2.7	3.6		95	315	
June	13.0	13.6		10.0	9.5		2.9	4.0		95	412	
July	14.4	14.6		11.0	10.3		3.3	4.2		101	311	
August	15.8	15.7		12.2	11.1		3.5	4.6		101	285	
September	17.0	16.7		13.2	11.9		3.8	4.7		108	208	
Season Total	17.0	16.7	18.7	13.2	11.9	13.2	3.8	4.7	5.5	90	229	4/173

1/ Preliminary.
2/ Season total based on January 1974 indications.
3/ Stocks in total positions.
4/ October-December average.

Table 23.--Feed and Industrial Molasses: Estimated supply and distribution, 1962-73

Year beginning October	PRODUCTION									Inshipments Puerto Rico	Imports	Total U.S. Supply
	Cane					Beet	Citrus	Corn, hydrol	Total production			
	Florida	Louisiana	Hawaii	Refiners' blackstrap	Total cane							
	Million gallons											
1962	27	39	53	38	157	96	5	26	284	17	290	591
1963	29	61	62	35	187	129	4	31	351	18	255	624
1964	47	56	58	35	196	132	9	27	364	17	264	645
1965	39	47	60	37	183	115	10	24	332	12	304	648
1966	40	43	60	39	182	113	17	20	332	5	351	688
1967	43	55	61	38	197	104	9	19	329	6	358	693
1968	37	51	63	46	197	136	14	21	368	6	347	721
1969	35	40	58	47	180	156	12	21	369	3	378	750
1970	38	46	55	46	185	160	10	22	377	2	402	781
1971	43	43	56	52	194	161	8	22	385	*	433	818
1972 1/	69	55	53	57	234	162	10	23	429	1	420	850
1973 2/	61	49	54	51	3/215	137	10	23	385	---	425	810

Year beginning October	DISTRIBUTION						
	Livestock feed 4/	Distilled spirits and alcohol	Other 5/	Domestic use 6/	Exports		
					Puerto Rico	Mainland	Total
	Million gallons						
1962	456	5	125	586	20	5	25
1963	480	5	135	620	16	4	20
1964	487	10	145	642	10	3	13
1965	481	15	150	646	17	2	19
1966	511	26	150	687	18	1	19
1967	513	21	150	684	10	9	19
1968	555	6	155	716	6	5	11
1969	577	11	155	743	3	7	10
1970	617	7	155	779	3	2	5
1971	647	6	160	813	1	5	6
1972 1/	681	6	160	847	*	3	3
1973 2/	641	5	160	806	1	4	5

1/ Preliminary. 2/ Forecast January 1974. 3/ Includes allowance for Texas. 4/ Residual; includes other minor uses and waste. 5/ Allowance for pharmaceutical products, yeast, citric acid, vinegar, pesticides, etc. Also includes small quantities of edible sirups. 6/ Not adjusted for change in stocks for which data are not available. * Less than 500,000 gallons.

Table 24.--Hay (all): Acreage, supply, disappearance, and prices, 1969-73

Item	Unit	1969/70	1970/71	1971/72	1972/73 prel.	1973/74 1/ forecast
Acreage harvested	Mil. acres	59.7	61.5	61.4	59.8	62.2
Yield per acre	Tons	2.11	2.06	2.10	2.15	2.16
Carryover (May 1)	Mil. tons	23.7	24.1	22.2	25.5	24.3
Production	"	126.0	127.0	129.1	128.6	134.6
Supply	"	149.7	151.1	151.3	154.1	158.9
Disappearance	"	125.6	128.9	125.8	129.8	
Roughage-Consuming Animal Units (RCAU)	"	94.2	96.6	96.7	100.3	106.9
Supply per RCAU	Tons	1.59	1.57	1.55	1.54	1.49
Disappearance per RCAU	Tons	1.33	1.34	1.30	1.29	
Season price received by farmers	$ per ton	24.70	26.10	28.10	31.30	40.60
Sold by farmers	Mil. tons	23.3	24.4	25.9	25.7	
Proportion of crop	Percent	18	19	19	20	
Value of production	$ Mil.	2,937	3,073	3,336	3,732	4,879
Value of sales	"	575	634	704	807	

1/ Jan. 1 indications.

Table 25.--Hay: Supply, May-December and January-April disappearance total and per roughage consuming animal unit, 1965-73

Year beginning May 1	Total supply 1/	May-Dec. disappearance	Following-- Jan. 1 stocks	Following-- Jan.-April disappearance	Following-- April 30 stocks	Disappearance per animal unit May-Dec.	Disappearance per animal unit Jan.-April
	Mil. tons	Mil. tons	Mil. tons	Mil. tons	Mil. tons	Tons	Tons
1965	142.2	53.6	88.6	65.9	22.7	.57	.70
1966	143.6	58.7	84.9	63.0	21.9	.62	.67
1967	147.0	58.5	88.5	63.6	24.9	.62	.68
1968	149.1	59.4	89.7	66.0	23.7	.63	.71
1969	149.7	61.7	88.0	63.9	24.1	.65	.68
1970	151.1	63.5	87.6	65.4	22.2	.66	.68
1971	151.3	61.9	89.4	63.9	25.5	.64	.66
1972	154.1	65.3	88.8	64.5	24.3	.65	.64
1973 2/	158.9	65.5	93.4			.61	

1/ Production plus May 1 Stocks.
2/ Preliminary.

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Cost of Storing and Handling Grain in Commercial Elevators, Projections for 1974/75

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ABSTRACT: Grain handling and storage costs associated with operating commercial grain elevators are projected for fiscal 1974/75. Standardized book cost for storage is 9.7 cents per bushel and the replacement cost is 18.4 cents. The book cost is 17% higher than in 1971/72, while the replacement storage cost is 24% higher. Although projected volume handled is expected to be larger in 1974/75, it is not sufficient to offset increased cost of inputs. Thus, the per bushel cost of handling grain will also be higher.

KEY WORDS: Grain elevators, average costs and grain handling.

American farmers harvest tremendous amounts of grain—over 11 billion bushels in 1973. Between harvest and utilization, these grains may be handled and stored several times. These marketing functions are performed mostly by the commercial grain elevator industry. The costs of providing these important marketing services are of concern to the industry as a group, to individual firms within the industry, and to the customers who purchase these services.

In recent years, the Economic Research Service has conducted a series of studies providing information on the operating costs associated with handling and storing grain in commercial grain elevators (1).[1] Cost data have been obtained from a stratified random sample of individual elevator firms approved to handle and store grain for the Commodity Credit Corporation (CCC).

In non-survey years, storage and handling costs have been updated and projected on the basis of estimated costs and volume changes. Costs for 1974/75 fiscal year (July-June) are projected from the base survey year 1971/72. Data and methodology for the base year and projections are presented in (5).

Methods of Costing

Two methods of costing were developed. A *standardized book cost* recomputes the depreciation and interest expense data collected from survey plants using standard rates for all plants. The rates were applied to original acquisition costs of buildings and equipment. The second method, *replacement* costs, substitutes book depreciation and interest on investment expenses with values based on the estimated cost of replacing the elevator's physical plant assets at the projected year's price level. Standardized book costs are usually 45 to 50 percent lower than the replacement costs for grain storage in all facilities. This difference is attributable to the larger proportion of the total replacement costs ascribed to capital asset expenses—about one-third of total book costs and about three-fourths of total replacement costs. Average book costs more nearly represent the actual expected expenditures an elevator operator will incur, and average replacement costs reflect the expenses associated with a new elevator entering the industry.

Projected grain storage and handling costs for 1974/75 are dependent on the estimated change in the prices of operating inputs and the estimated volume of grain to be handled and stored.

Projecting Cost Increases

The following estimated increases in operating costs were used to project handling and storage costs expected to prevail in 1974/75. These increases were applied to costs developed from the 1971/72 survey data.

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[1] Numbers in parenthesis refer to references listed on page 33.

Cost item	Increases 1971/72 to 1974/75
	Percent
Fixed costs:	
Building and equipment depreciation	22
Building and equipment insurance	22
Building and equipment taxes	22
Building and equipment interest on invested capital[1]	22
Variable costs:	
Direct labor	19
Administrative overhead	19
Electricity, heat, etc.	20
Building and equipment repairs	22
Insurance on grain	49
All other items	11

[1] Interest on invested capital was calculated at 8.0 percent of one-half of the replacement value of building and equipment.

Projecting Storage and Handling Volumes

Per bushel costs are highly dependent on the volume of grain stored and handled. Table 1 indicates that the expected average annual volume of grain *stored* in commercial grain elevators in 1974/75 will be slightly less than in 1971/72. Grain stocks going into the 1974/75 fiscal year will be sharply lower than in 1971/72, but total grain production in 1974 is expected to be about 17% larger than the 1971 crop. With exports at record levels, average stock volumes at port terminals are expected to be higher but this will be more than offset by lower stock levels at inland terminals and country elevators. With projected grain production, disappearance, and exports for 1974/75 expected to be sharply higher than in 1971/72, the volumes *handled* at grain elevators should be somewhat higher.

1974/75 Storage Costs

Projected increases in the prices of major cost items combined with a slightly lower expected storage volume would increase book cost by 17% and replacement cost by 24% above the 1971/72 level. When 1974/75 projected storage cost is compared to the estimated cost of 1973/74, (5), book cost is 5% higher and replacement cost is 7% higher.[2]

Based on projected changes in cost and volume between 1971/72 and 1974/75, the average replacement cost for storing grain at all types of elevator facilities during 1974/75 is estimated to be 18.44 cents per bushel (table 2). The 1974/75 standardized book cost is estimated to be 9.72 cents per bushel (table 3). The difference of 8.72 cents per bushel represents cost attributed to the replacement method of costing elevator operations, basically assuming an elevator's structure constructed at 1974/75 price levels. Average occupacy level is estimated at 54.1% compared with 55.3% in 1971/72 (table 1).

Table 1.—Average occupancy levels by area and type of facility, United States, fiscal 1971/72 and 1974/75

Area and type of facility	Average occupancy	
	1971/72[1]	1974/75[2]
	Percent	Percent
North Plains[3]	80.1	76.5
Mid-Plains[4]	53.9	51.0
South Plains[5]	38.8	38.3
West[6]	58.5	49.9
Great Lakes[7]	60.7	66.5
South and East[8]	53.5	62.0
United States	55.3	54.1
Country	55.5	53.5
Inland terminal	51.7	51.3
Port terminal	67.4	70.6

[1] Plants surveyed by mail in 1972. [2] Projections for 1974/75. [3] N. Dak., S. Dak., and Minn., (excluding port facilities. [4] Nebr., Kans., Colo., Wyo., Iowa, and Mo. [5] Okla., N. Mex., and Texas plus all Gulf port facilities. [6] Wash., Oreg., Idaho, Mont., Calif., Ariz., Nev., and Utah. [7] Wis., Ill., Ind., Ohio, Mich., and Minn. port facilities. [8] Ark., Miss., S.C., Tenn., Ky., N.Y., Va., Pa., N.J., Md., Del., La., Ala., Ga., N.C., W. Va., and New England. (All Gulf ports are included in the South Plains.)

When facilities are utilized at projected 1974/75 storage volume levels as shown in table 1, the average yearly storage costs per bushel using replacement values will be 18.2 cents at country elevators, 16.7 cents at inland terminals, and 25.0 cents at port terminals (table 2). Comparable book costs for 1974/75 range close to one-half of the replacement cost or 10.6, 7.0, and 11.6 cents per bushel at country, inland, and port terminals respectively (table 3).

Combined Handling and Storage Costs

The combined average replacement costs for handling and storing a bushel of grain in each type of elevator by geographical area are presented in table 4.

Combining the cost of receiving and shipping grain by a specific method with 1 year's storage costs more nearly shows the total expected grain marketing costs that occur at commercial grain elevators.

For *country elevators*, the 1974/75 combined cost of handling and storing grain is estimated to be 23.6 cents per bushel. This amount includes the cost of storage for 1 year plus the cost of receiving by truck and shipping by rail. The comparable book cost is 15.5 cents.

At *inland terminals*, the 1974/75 combined cost of receiving and shipping by rail plus storage for 1 year is estimated to average 22.2 cents per bushel. Book cost is 11.0 cents.

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[2] The 1973/74 costs were developed in 1973 and have not been recomputed to reflect actual price and volume data now available.

For *port terminals*, the cost of receiving by rail, storing for 1 year, and shipping by water is estimated at 28.3 cents per bushel and the book cost is 14.0 cents.

The estimated 1974/75 standardized book and replacement costs for each expense item by function and type of facility are shown in tables 5-8.

Costs at Varying Volumes

All weighted average costs per bushel presented in this report are based on a specified volume of grain handled and stored. By establishing a grain volume 10% greater and 10% less than the specified volume, a range of per bushel costs was developed for each function. The actual replacement cost for handling and storing during 1974/75 will likely be within this high-low cost range. The 1974/75 storage cost at all facilities for varying volumes ranges between 17.2 and 20.0 cents per bushel (table 9). At country elevators the range is 17.0 to 19.7 cents; at inland terminals 15.5 to 18.2 cents and at port terminals 23.1 to 27.3 cents per bushel. Although a 10% change in volumes handled can represent a considerable quantity of grain, the high-low handling cost per bushel spread is not large because much of the total handling cost is variable.

REFERENCES

(1) Costs of Storing and Handling Grain in Commercial Elevators, 1964-65. USDA. Econ. Res. Serv., ERS-288, April 1966.

(2) Cost of Storing and Handling Grain in Commercial Elevators, 1967-68, and projections for 1969-70. USDA, Econ. Res. Serv., ERS-401, Feb. 1969.

(3) Estimated Cost of Storing and Handling Grain in Commercial Elevators, 1971-72. USDA, Econ. Res. Serv., ERS-475, March 1971.

(4) Cost of Storing and Handling Grain in Commercial Elevators, 1970-71 and projections for 1972-73. USDA, Econ. Res. Serv., ERS-501, March 1972.

(5) Cost of Storing and Handling Grain and Controlling Dust in Commercial Elevators, 1971-72. . .projections for 1973-74. USDA, Econ. Res. Serv., ERS-513, March 1973.

Table 2 - Replacement costs, estimated weighted average cost per bushel, for storing and handling grain, by area and type of facility, United States, fiscal 1974/75 1/

Area and type of facility	Received by--			Loadout by--			Storage
	Truck	Rail	Water	Truck	Rail	Water	
	Cents						
North Plains:							
Country	2.32	--	--	1.84	2.24	--	18.35
Inland terminal	1.53	2.68	--	5.48	2.50	1.27	9.81
Port terminal	--	--	--	--	--	--	--
Mid-Plains:							
Country	2.65	2.33	--	3.16	2.94	.71	17.14
Inland terminal	3.07	3.42	--	2.49	2.47	.87	18.73
Port terminal	--	--	--	--	--	--	--
South Plains:							
Country	3.15	--	--	2.62	4.62	--	18.70
Inland terminal	3.18	3.52	--	3.91	2.90	--	26.60
Gulf port terminal	1.43	1.97	1.68	5.55	1.64	.95	26.08
West:							
Country	2.53	--	--	3.28	3.46	--	20.51
Inland terminal	2.29	1.71	--	2.64	1.52	.97	16.67
Port terminal	3.27	2.42	2.55	4.26	3.53	1.39	30.05
Great Lakes:							
Country	2.17	--	--	2.79	3.16	1.74	18.00
Inland terminal	1.98	2.31	6.05	.79	1.93	.34	13.23
Port terminal	2.71	2.43	3.56	3.78	2.81	1.34	23.19
South and East:							
Country	1.53	1.82	4.48	3.36	3.53	1.01	21.77
Inland terminal	2.23	1.78	3.85	3.21	3.26	2.00	11.84
East port terminal	4.00	2.00	3.91	10.87	6.70	2.12	23.54
United States:							
Country	2.39	2.25	4.47	2.76	3.04	1.12	18.18
Inland terminal	2.29	2.97	4.28	2.02	2.49	.90	16.72
Port terminal	2.50	2.19	1.79	6.41	2.84	1.13	25.03
All facilities	2.39	2.50	1.96	2.72	2.88	1.08	18.44

1/ Depreciation and interest on investment based on replacing building and equipment at 1974/75 price levels.

Note: See table 1 for delineation of areas.

Table 3 - Standardized book costs, weighted average cost per bushel, for storing and handling grain, by area and type of facility, United States, fiscal 1974/75 1/

Area and type of facility	Received by-- Truck	Received by-- Rail	Received by-- Water	Loadout by-- Truck	Loadout by-- Rail	Loadout by-- Water	Storage
	Cents						
North Plains:							
Country	2.14	--	--	1.71	2.04	--	11.08
Inland terminal	1.31	2.25	--	3.12	1.90	1.07	5.07
Port terminal	--	--	--	--	--	--	--
Mid-Plains:							
Country	2.47	2.21	--	2.93	2.53	.68	9.41
Inland terminal	2.10	2.40	--	1.80	1.92	.72	7.26
Port terminal	--	--	--	--	--	--	--
South Plains:							
Country	2.66	--	--	2.23	3.39	--	7.94
Inland terminal	2.08	2.17	--	2.13	1.65	--	8.21
Gulf port terminal	1.08	1.46	1.58	3.55	1.14	.80	18.14
West:							
Country	2.12	--	--	2.64	3.03	--	9.67
Inland terminal	1.86	1.46	--	1.85	1.29	.76	9.85
Port terminal	2.23	1.97	1.92	2.39	2.25	1.11	17.06
Great Lakes:							
Country	2.12	--	--	2.64	3.04	1.80	13.77
Inland terminal	1.71	1.81	4.46	.64	1.57	.31	7.46
Port terminal	1.49	1.56	1.95	1.61	1.71	.94	7.37
South and East:							
Country	1.46	1.74	4.39	3.08	3.24	1.04	14.54
Inland terminal	2.10	1.50	4.02	2.32	2.94	2.10	6.68
East port terminal	2.56	1.16	2.61	4.11	3.22	1.47	7.18
United States:							
Country	2.22	2.12	4.39	2.52	2.70	1.12	10.60
Inland terminal	1.77	2.16	4.10	1.33	1.85	.79	6.97
Port terminal	1.47	1.51	1.61	2.97	1.72	.89	11.57
All facilities	2.12	1.77	1.79	2.42	2.42	.92	9.72

1/ Depreciation based on standardized depreciation rates applied to original acquisition cost of buildings and equipment.

Note: See table 1 for delineation of areas.

Table 4 - Estimated weighted average replacement costs per bushel for storing and handling grain by area, type of facility, and handling method, United States, fiscal 1974/75

Area, type of facility, and handling method	Average costs for--							
	Receiving		Shipping		Storage		Combined	
	Out-of-pocket cost 2/	Total cost 3/	Out-of-pocket cost 2/	Total cost 3/	Out-of-pocket cost 2/	Total cost 3/	Out-of-pocket cost 2/	Total cost 3/
	Cents							
North Plains								
Country:								
Truck & rail 4/	2.0	2.3	1.9	2.2	8.6	18.4	12.5	23.1
Inland terminal:								
Rail & rail 5/	2.0	2.7	1.8	2.5	3.7	9.8	7.5	15.0
Mid-Plains								
Country:								
Truck & rail	2.2	2.6	2.2	2.9	6.0	17.1	10.4	22.6
Inland terminal:								
Rail & rail	2.3	3.4	1.8	2.5	5.3	18.7	9.4	24.6
South Plains								
Country:								
Truck & rail	2.5	3.1	3.1	4.6	4.9	18.7	10.5	26.4
Inland terminal:								
Rail & rail	1.8	3.5	1.4	2.9	5.9	26.6	9.1	33.0
Port terminal:								
Rail & water 6/	1.2	2.0	0.7	1.0	6.5	26.1	8.4	29.1
West								
Country:								
Truck & rail	2.0	2.5	2.8	3.5	7.2	20.5	12.0	26.5
Inland terminal:								
Rail & rail	1.4	1.7	1.2	1.5	6.8	16.7	9.4	19.9
Port terminal:								
Rail & water	1.8	2.4	1.0	1.4	8.3	30.1	11.1	33.9
Great Lakes								
Country:								
Truck & rail	1.9	2.2	2.8	3.2	8.6	18.0	13.3	23.4
Inland terminal:								
Rail & rail	1.7	2.3	1.3	1.9	4.5	13.2	7.5	17.4
Port terminal:								
Rail & water	1.5	2.4	0.9	1.3	5.4	23.2	7.8	26.9
South & East								
Country:								
Truck & rail	1.3	1.5	2.8	3.5	9.8	21.8	13.9	26.8
Inland terminal:								
Rail & rail	1.4	1.8	2.7	3.3	4.4	11.8	8.5	16.9
Port terminal:								
Rail & water	1.1	2.0	1.4	2.1	4.5	23.5	7.0	27.6
United States								
Country:								
Truck & rail	2.0	2.4	2.5	3.0	7.1	18.2	11.6	23.6
Inland terminal:								
Rail & rail	2.0	3.0	1.7	2.5	4.9	16.7	8.6	22.2
Port terminal:								
Rail & water	1.4	2.2	0.8	1.1	6.0	25.0	8.2	28.3
All facilities 7/	--	--	--	--	6.4	18.4	--	--

1/ Cost based on estimated 1974/75 replacement values and volumes assumed to be distributed as in 1971-72. 2/ Excludes depreciation and interest on investment. 3/ Includes depreciation and interest on investment. 4/ Grain received by truck, stored, and shipped by rail. 5/ Grain received by rail, stored, and shipped by rail. 6/ Grain received by rail, stored, and shipped by water. 7/ Average handling costs omitted due to different receiving and shipping methods for each type of facility.

Note: See table 1 for delineation of areas.

Table 5 - All facilities: Weighted average book and replacement costs per bushel for storing and handling grain, United States, fiscal 1974/75

Cost item	Received by--			Loadout by--			Storage
	Truck	Rail	Water	Truck	Rail	Water	
	Cents						
Fixed costs							
Building & equipment							
Insurance	0.020	0.014	0.016	0.029	0.028	0.007	0.614
Taxes	.032	.035	.011	.048	.046	.011	1.177
Leases	.026	.044	.118	.023	.023	.040	.862
Depreciation 1/							
Book	.138	.095	.083	.200	.164	.051	1.726
Replacement	.285	.571	.243	.347	.428	.168	5.290
Interest on investmant							
Book	.024	.018	.013	.032	.024	.012	.732
Replacement 2/	.164	.314	.138	.200	.241	.101	6.750
Licenses & bonds	--	--	--	--	--	--	.132
Total fixed cost							
Book 3/	.240	.206	.241	.332	.285	.121	5.243
Replacement 4/	.501	.934	.408	.624	.743	.287	13.963
Variable costs							
Direct labor	.748	.828	.728	.692	.887	.379	1.592
Administrative overhead	.528	.249	.102	.540	.489	.143	1.032
Electricity, heat, etc.	.094	.085	.071	.133	.122	.041	.091
Truck expenses	.113	.011	.005	.200	.087	.007	--
Building repairs	.004	.002	.002	.006	.004	.002	.523
Equipment repairs	.121	.086	.125	.167	.165	.064	.103
Insurance on grain	--	--	--	--	--	--	.517
Taxes on grain	--	--	--	--	--	--	.124
Fumigation	--	--	--	--	--	.019	.161
Other 5/	.241	.278	.493	.309	.339	.127	.205
Interest on working capital 6/	.035	.026	.026	.044	.044	.013	.124
Total variable cost	1.884	1.565	1.552	2.091	2.137	.795	4.472
Total cost per bushel							
Book	2.124	1.771	1.793	2.423	2.422	.916	9.715
Replacement	2.385	2.499	1.960	2.715	2.880	1.082	18.435

1/ Standardized depreciation rates applied to book acquisition cost of capital assets and to the 1974/75 replacement cost of elevator assets.
2/ Calculated at 8.0 percent of one-half of the 1974/75 replacement value of building and equipment. 3/ Includes all fixed cost items. 4/ Excludes lease costs. 5/ Includes such items as supplies, audit, legal, and protective services, dues, subscriptions, travel, advertising and donations. 6/ Calculated at 7.0 percent of one-fourth of the total out-of-pocket cost.

Table 6 - Country facilities: Weighted average book and replacement costs per bushel for storing and handling grain, United States, fiscal 1974/75

Cost item 1/	Received by--			Loadout by--			Storage
	Truck	Rail	Water	Truck	Rail	Water	
	Cents						
Fixed costs							
Building & equipment							
Insurance	0.021	0.012	0.024	0.030	0.036	0.007	0.774
Taxes	.031	.027	.005	.048	.052	.011	1.301
Leases	.017	.114	.052	.023	.022	.005	.626
Depreciation							
Book	.144	.036	.190	.208	.190	.114	1.979
Replacement	.221	.170	.241	.321	.372	.095	4.897
Interest on investment							
Book	.026	--	.058	.034	.028	.038	.928
Replacement	.132	.103	.141	.187	.213	.055	6.214
Licenses & bonds	--	--	--	--	--	--	.164
Total fixed cost							
Book	.239	.189	.329	.343	.328	.175	5.772
Replacement	.405	.312	.411	.586	.673	.168	13.350
Variable costs							
Direct labor	.762	.305	.904	.722	.996	.389	1.566
Administrative overhead	.570	.903	.242	.554	.531	.148	1.176
Electricity, heat, etc.	.091	.086	.163	.135	.141	.062	.082
Truck expenses	.132	.194	.046	.215	.118	.017	--
Building repairs	.004	.002	.003	.006	.005	.001	.639
Equipment repairs	.124	.068	.249	.175	.203	.128	.097
Insurance on grain	--	--	--	--	--	--	.617
Taxes on grain	--	--	--	--	--	--	.145
Fumigation	--	--	--	--	--	--	.154
Other	.260	.344	2.388	.322	.324	.136	.205
Interest on working capital	.037	.032	.068	.046	.052	.016	.148
Total variable cost	1.980	1.934	4.063	2.175	2.370	.947	4.829
Total cost per bushel							
Book	2.219	2.123	4.392	2.518	2.698	1.122	10.601
Replacement	2.385	2.246	4.474	2.761	3.043	1.115	18.179

1/ See footnotes, table 5, for explanation of various cost items.

Table 7 - Inland terminals: weighted average book and replacement costs per bushel for storing and handling grain, United States, fiscal 1974/75

Cost item 1/	Received by--			Loadout by--			Storage
	Truck	Rail	Water	Truck	Rail	Water	
	Cents						
Fixed costs							
Building & equipment							
Insurance	0.013	0.013	0.029	0.013	0.009	0.005	0.247
Taxes	.042	.050	.030	.042	.034	.017	.919
Leases	.041	.009	.045	.017	.019	.018	.410
Depreciation							
Book	.138	.140	.639	.114	.113	.063	1.331
Replacement	.464	.630	.560	.542	.510	.120	5.209
Interest on investment							
Book	.017	.014	--	.008	.015	.001	.306
Replacement	.253	.344	.299	.295	.281	.072	6.586
Licenses & bonds	--	--	--	--	--	--	.077
Total fixed cost							
Book	.251	.226	.743	.194	.190	.104	3.290
Replacement	.772	1.037	.918	.892	.834	.214	13.038
Variable costs							
Direct labor	.679	.944	1.473	.335	.623	.332	1.509
Administrative overhead	.412	.406	.208	.393	.424	.166	.798
Electricity, heat, etc.	.105	.112	.272	.108	.082	.049	.107
Truck expenses	.024	.017	.015	.039	.024	.003	--
Building repairs	.002	.003	.004	.001	.003	.001	.238
Equipment repairs	.083	.107	.709	.071	.033	.058	.112
Insurance on grain	--	--	--	--	--	--	.284
Taxes on grain	--	--	--	--	--	--	.105
Fumigation	--	--	--	--	--	--	.222
Other	.184	.312	.623	.166	.389	.067	.230
Interest on working capital	.025	.033	.055	.019	.028	.012	.078
Total variable cost	1.514	1.934	3.359	1.132	1.656	.688	3.683
Total cost per bushel							
Book	1.765	2.160	4.104	1.326	1.846	.792	6.973
Replacement	2.286	2.971	4.277	2.024	2.490	.902	16.721

1/ See footnotes, table 5, for explanation of various cost items.

Table 8 - Port terminals: Weighted average book and replacement costs per bushel for storing and handling grain, United States, fiscal 1974/75

Cost item 1/	Received by--			Loadout by--			Storage
	Truck	Rail	Water	Truck	Rail	Water	
	- - - - - -	- - - - - -	- - - - - -	Cents	- - - - - -	- - - - - -	- - - - - -
Fixed costs							
Building & equipment							
Insurance	0.015	0.014	0.015	0.039	0.019	0.007	0.580
Taxes	.035	.026	.009	.083	.038	.009	1.081
Leases	.099	.067	.123	.337	.052	.057	3.744
Depreciation							
Book	.062	.065	.043	.190	.060	.028	1.152
Replacement	.791	.536	.220	2.665	.803	.206	3.166
Interest on investment							
Book	.018	.021	.013	.052	.014	.008	.627
Replacement	.417	.295	.127	1.408	.441	.125	10.324
Licenses & bonds	--	--	--	--	--	--	.073
Total fixed cost							
Book	.229	.193	.203	.756	.183	.109	7.257
Replacement	1.258	.871	.371	4.200	1.301	.347	20.724
Variable costs							
Direct labor	.673	.755	.674	1.125	.847	.391	2.005
Administrative overhead	.196	.142	.093	.320	.236	.133	.732
Electricity, heat, etc.	.113	.067	.056	.304	.082	.033	.100
Truck expenses	.008	.006	.004	.024	.006	.006	--
Building repairs	.004	.002	.001	.002	.003	.002	.549
Equipment repairs	.133	.072	.082	.274	.089	.047	.110
Insurance on grain	--	--	--	--	--	--	.506
Taxes on grain	--	--	--	--	--	--	.038
Fumigation	--	--	--	--	--	.030	.041
Other	.089	.255	.474	.119	.250	.129	.132
Interest on working capital	.021	.022	.024	.038	.026	.013	.097
Total variable cost	1.237	1.321	1.418	2.206	1.539	.784	4.310
Total cost per bushel							
Book	1.466	1.514	1.616	2.972	1.722	.893	11.567
Replacement	2.495	2.192	1.738	6.406	2.840	1.131	25.034

1/ See footnotes, table 5, for explanation of various cost items.

Table 9 - Weighted average replacement cost per bushel for storing and handling grain with 10-percent increase and decrease in volumes, by type of facility, United States, fiscal 1974/75 1/

Type of facility	Received by--						Loadout by--						Storage	
	Truck		Rail		Water		Truck		Rail		Water			
	Volume change of--													
	-10%	+10%	-10%	+10%	-10%	+10%	-10%	+10%	-10%	+10%	-10%	+10%	-10%	+10%
	Cents													
Country	2.4	2.3	2.3	2.2	4.5	4.4	2.8	2.7	3.1	3.0	1.1	1.1	19.7	17.0
Inland terminal	2.4	2.2	3.1	2.9	4.4	4.2	2.1	1.9	2.6	2.4	0.9	0.9	18.2	15.5
Port terminal	2.6	2.4	2.3	2.1	1.8	1.7	6.9	6.0	3.0	2.7	1.2	1.1	27.3	23.1
All facilities	2.4	2.3	2.6	2.4	2.0	1.9	2.8	2.7	3.0	2.8	1.1	1.1	20.0	17.2

1/ Costs were developed from the data used for tables 5, 6, 7, and 8 with an increase and decrease of 10 percent in volumes received, shipped, and stored.

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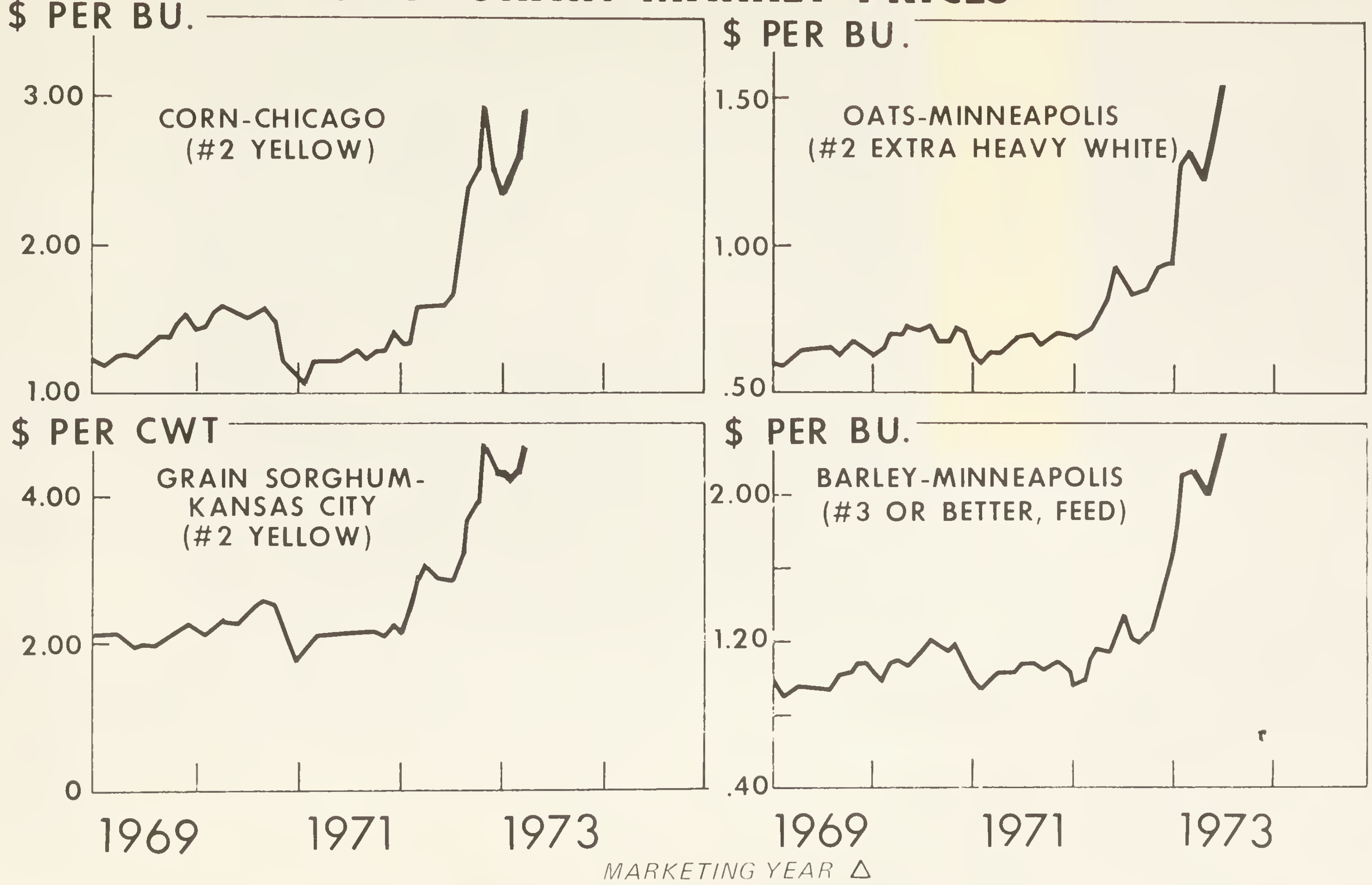

△ BEGINNING OCT. 1 FOR CORN AND GRAIN SORGHUM, JULY 1 FOR OATS AND BARLEY

SOURCE: GRAIN MARKET NEWS, AMS.

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